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ABSTRACT

The purpose of this study was to examine the role expectations and role adequacy of classroom teachers in art, music, and physical education programs in selected schools, as well as teacher perceptions of the specialists' roles in these subjects. Two different staffing arrangements were examined: (1) schools employing consultants in art, music, and physical education; and (2) schools employing specialists to work with teachers. The effectiveness of each staffing arrangement is examined. The way teachers react to such arrangements and how the arrangements influence teacher perception of their work is analyzed and discussed. (JD)

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Technical Report No. 439

ROLE BEHAVIORS OF STAFF TEACHERS IN IGE SCHOOLS
UTILIZING TWO DIFFERENT STAFFING ARRANGEMENTS FOR
ART, MUSIC, AND PHYSICAL EDUCATION PROGRAMS

by

Renee Elizabeth Forrest

Report from the Project on
Studies of the Role of Specialist Teachers in IGE Schools

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November 1977

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Abstract

ROLE BEHAVIORS OF STAFF TEACHERS IN IGE SCHOOLS UTILIZING TWO DIFFERENT STAFFING ARRANGEMENTS FOR ART, MUSIC, AND PHYSICAL EDUCATION PROGRAMS

Renee Elizabeth Forrest

Under the Supervision of Professor Robert G. Petzold

The purpose of the study was to examine the role expectations and role adequacy of classroom teachers in art, music, and physical education programs in selected IGE schools, as well as their perceptions of the specialists' roles. It was posited that no significant differences would emerge as a function of staffing arrangements utilizing specialist teachers or consultants, or as a function of subject area. Role theory provided the theoretical basis for the study.

A single questionnaire, modified to accommodate the three subject areas, consisted of three sets of tasks, each requiring a frequency-type response for actual and ideal behaviors. Data were collected from 296 classroom teachers in 24 IGE schools served by specialist teachers and 23 served by consultants.

A two-way analysis of variance was used to test the five major hypotheses and two ancillary questions dealing with differences attributed to staffing arrangement or subject area. Pearson product-moment correlations were used to obtain information about classroom teachers'

confidence in teaching the special subject areas and program effectiveness. The Spearman Rank-Order Correlation was calculated to determine the relationship between tasks performed by classroom teachers in specialist teacher and consultant schools. The probability levels for all tests of statistical significance was established at .05.

The major conclusions were:

1. Classroom teachers working in schools employing consultants in art, music, and physical education are more involved in special area programs than classroom teachers in specialist schools.
2. Classroom teachers working in both specialist schools and consultant schools believe they should be more involved in the special area programs, with classroom teachers in consultant schools viewing their potential involvement as greater than that of classroom teachers in specialist schools.
3. Classroom teachers in both specialist schools and consultant schools view their role in the special subject areas with the same degree of adequacy. In other words, the degree of difference between what classroom teachers believe they should be doing and what they are actually doing in art, music, and physical education is the same for both staffing arrangements.
4. Classroom teachers perform the same tasks in both specialist schools and consultant schools, but in consultant schools these tasks are performed more frequently. The average frequency with which classroom teachers in consultant schools performed all 23 real role tasks was between "once a month" and "less often than once a month." The average frequency for classroom teachers in specialist schools was between "less often than once a month" and "once a year."
5. Classroom teachers do not perceive differences between the real role behavior of specialists and that of consultants. They do perceive a limited degree of difference in the ideal role of specialist personnel in that consultants ideally should be more involved with classroom teachers in the special area program than should specialists.
6. The effectiveness of a special area program depends most upon the input of the specialist, especially in specialist

teacher schools. The input of the classroom teachers, even in consultant schools where their involvement is greater, has a negligible effect on classroom teachers' perceptions of program effectiveness.

7. Classroom teachers are most confident teaching art, and consequently are most involved in the art program. Although classroom teachers are more confident about teaching physical education than music, they are more involved in the music program. In general, classroom teachers believe their involvement in art and music to be adequate, but agree that they could be more involved in physical education.
8. Sharing information with specialists and integrating the special subject areas into the curriculum are the most frequently performed classroom teacher tasks, while staff development and instructional leadership tasks in art, music, and physical education are the least frequently performed classroom teacher tasks.
9. In consultant schools, consultants provide services which could increase classroom teacher involvement in the special subject areas less often than once a year. The incidence of such support services is even less in specialist schools.

APPROVED: Robert B. Retzold

DATE: 10/20/77

CHAPTER I

INTRODUCTION

Learning experiences in art, music, and physical education have long been accepted as contributing to the intellectual, physical, and socio-emotional development of children, suggesting that quality programs in these areas should be readily available to all children. Although school systems generally offer programs in these areas to their students, the extent to which elementary school children have ready access to meaningful experiences in art, music, and physical education depends upon several factors, one of which is the type of staffing arrangement that is utilized to provide for instruction in these areas.

In terms of instructional responsibility, three basic staffing arrangements have been identified: (1) schools served by specialist teachers in which the specialist provides all of the instruction children receive in a special subject area and the instructional involvement of classroom teachers is both optional and minimal; (2) schools served by consultants in which the specialist provides a substantial portion of the instruction children receive in the special subject areas with these responsibilities shared with classroom teachers; and (3) schools served by supervisors who do no regular teaching but provide instructional leadership and assistance to classroom teachers who may be expected to teach art, music, or physical education. In

the original organizational model of an IGE school, teachers in the special subject areas were considered "external consultants" regardless of the type of staffing arrangement utilized by the school.

Individually Guided Education (IGE) is a comprehensive system of education designed by the Wisconsin Research and Development Center for Cognitive Learning to meet the needs and learning characteristics of students in elementary schools. One of seven interrelated components of IGE is the multiunit school organization, an administrative structure which replaces the age-graded/self-contained classroom of the traditional school and is designed to facilitate individual learning. The multiunit school is organized to provide for open communication among school personnel, educational and instructional decision making, and accountability by educational personnel. Each unit includes a unit leader, three to five staff teachers, and 100 to 150 multiaged children. The main function of each unit is to plan, carry out and evaluate instructional programs for each student in the unit. The role of the classroom teacher within the unit structure has changed to allow for meeting students' individual learning needs through "planning with other members of the unit, working with many children and with other unit members rather than working with a smaller number of children independently, and performing at a more professional level" (Klausmeier et al., 1971, p. 41). The role of the classroom teacher in the IGE school does not, however, include specified responsibilities in the areas of art, music, or physical education.

While classroom teachers were actively engaged in decision making about all components of the instructional program in their units, and in the school through the Instructional Improvement Committee (IIC), teachers in the special subject areas of art, music, and physical education were considered external consultants having only indirect input into the school's decision making process. Based on a suggestion in Individually Guided Education and the Multiunit Elementary school: Guidelines for Implementation (Klausmeier et al., 1971), many schools rotate art, music, physical education and library in 30 minute blocks (except art, which is 60 minutes) to provide released time for classroom teacher planning. In these situations, art, music, and physical education activities often occur only when a specialist is teaching, regardless of the amount of time specialists may be assigned to the school. Furthermore, there is no evidence to suggest that classroom teachers generally include activities in these areas in the children's daily instruction program. For this reason, a frequent criticism of the multiunit organization is that while classroom teachers are planning, specialists are teaching and communication between the two groups of teachers is limited or nonexistent. In some schools where classroom teachers are primarily responsible for teaching the special subject areas, instruction has been neglected due to constraints of time and rigid grouping and scheduling practices (Petzold, 1977).

Each of the roles in the multiunit organization, from the principal to the unit leader to the instructional secretary, has been

defined in specific terms, except for the role of special area personnel. Two responsibilities were delineated for specialists: (1) plan cooperatively with unit teachers, and (2) teach (Evers et al., 1975). No responsibilities have been delineated for classroom teachers in the special subject areas. The role of classroom teachers in art, music, and physical education, as well as the role of specialists in IGE schools, need further explication so that both classroom teachers and specialists can better understand and fulfill their roles in meeting the needs of students in all areas of the curriculum.

Purpose of the Study

This study was undertaken to fill the void in the role description of classroom teachers in IGE schools in the areas of art, music, and physical education regardless of whether a school is served by specialists responsible for all of the instruction children receive in the special subject areas or by consultants or supervisors who share that instructional responsibility with classroom teachers. The main purpose of this research was to examine the role expectations and role adequacy of classroom teachers, as well as classroom teachers' perceptions of specialists' roles in art, music, and physical education in selected IGE schools to ascertain whether significant differences might emerge as a function of the independent variable of staffing arrangement. A secondary purpose of this research was to determine whether differences in role expectations might emerge as a function of subject area. The results of this study will provide classroom

teachers with a set of role expectations which will help them understand and fulfill a possible role in art, music, and physical education programs and thus better meet the needs of students in these areas.

Hypotheses

The major hypotheses tested in this study are:

1. There are no differences in the real role of classroom teachers in the areas of art, music, and physical education as viewed by classroom teachers that can be attributed to staffing arrangements, utilizing specialist teachers or consultants.
2. There are no differences in the ideal role of classroom teachers in the areas of art, music, and physical education as viewed by classroom teachers that can be attributed to staffing arrangements, utilizing specialist teachers or consultants.
3. There are no differences in role adequacy of classroom teachers in the areas of art, music, and physical education as viewed by classroom teachers that can be attributed to staffing arrangements utilizing specialist teachers or consultants.
4. There are no differences in the real role of specialist personnel as viewed by classroom teachers which can be attributed to staffing arrangements utilizing specialist

teachers or consultants.

5. There are no differences in the ideal role of specialist personnel as viewed by classroom teachers which can be attributed to staffing arrangements utilizing specialist teachers or consultants.

The following ancillary questions were also investigated:

1. Do differences exist in the real and ideal roles and role adequacy of classroom teachers which can be attributed to subject area?
2. Do differences exist in the classroom teachers' perceptions of the real and ideal roles of specialists which can be attributed to subject area?
3. Is there a relationship between classroom teachers' confidence in teaching art, or music, or physical education and their real role behavior in art, or music, or physical education?
4. Is there a relationship between classroom teachers' perceptions of program effectiveness and the classroom teachers' real role behavior?
5. Is there a relationship between classroom teachers' perceptions of program effectiveness and the classroom teachers' perceptions of specialists' real role behavior?
6. Is there a relationship between classroom teachers' perceptions of program effectiveness and the combined real role behaviors of classroom teachers and specialists?

7. To what extent do the real role behaviors of classroom teachers in specialist schools relate to those same behaviors of classroom teachers in consultant schools?

Procedures

One questionnaire, modified to accommodate the three special subject areas, was developed to collect information from classroom teachers concerning their role and their perceptions of the role of the specialist personnel in art, or music, or physical education. The questionnaires consisted of three sections:

1. A list of possible tasks performed by classroom teachers in the designated area;
2. A list of possible tasks performed by specialist personnel in the designated area;
3. Teacher and school background information.

Each set of tasks required two frequency-type responses to each item: one for actual behavior and the other for ideal behavior.

The following criteria were adopted for selecting IGE schools to participate in the study:

1. The entire IGE school must be organized into the multiunit school structure with Instruction and Research Units and an Instructional Improvement Committee.
2. The school must include at least grades one to five.
3. The school must employ specialist teachers, consultants, or supervisors in all three special subject areas.

Forty-seven IGE schools were chosen from a pool of schools which met the given criteria. Twenty-four schools were served by specialist teachers and 23 schools were in the consultant staffing arrangement category. Every participating unit in each school received three classroom teacher questionnaires, one for each of the special subject areas. The principal had earlier identified classroom teachers with a particular interest or background in each of the special areas in order to direct the appropriate questionnaire to those individuals.

Classroom teachers were asked to complete the questionnaire and return it individually to the researcher. Follow-up procedures, including telephone calls and letters, netted a 79 percent response rate two months after the initial mailing. Questionnaires were processed and assigned to the appropriate staffing arrangement category before the data were analyzed.

Five sets of scores were calculated for each of the 296 respondents by summing the responses to various groups of items, including the real and ideal role behaviors of classroom teachers, the role adequacy of classroom teachers, and the classroom teachers' perceptions of the real and ideal role behaviors of specialist personnel. The scores were used to test the five major hypotheses and the first two ancillary questions by means of a two-way analysis of variance.

Pearson product-moment correlations were calculated to provide information for the third through sixth ancillary questions and the Spearman Rank-Order Correlation was used to provide data for the seventh ancillary question. STATJOB computer programs, available from the Madison

Academic Computing Center were used for most of the statistical analyses.

Organization of the Report

Chapter One has presented an overview of the study including the purpose, hypotheses, and procedures for collecting and analyzing the data. Chapter Two reviews research studies and position papers which describe the utilization of specialists and the involvement of classroom teachers in art, music, and physical education, the organizational structure of the elementary school as it may influence special area programs, and role theory as the theoretical basis for this study. Chapter Three details the sample selection and procedures for collecting and analyzing the data for this study. Chapter Four discusses the analysis of the data including reliability, tests of major hypotheses and ancillary questions, and descriptive background data. Chapter Five presents a summary of the study, the findings, conclusions and implications for practice and further research.

CHAPTER II

REVIEW OF THE LITERATURE

The utilization of specialist personnel in art, music, and physical education varies from school system to school system, and as this varies, so does the involvement of the classroom teacher. This chapter will review studies and position papers which describe the utilization of specialist personnel and the involvement of classroom teachers in the three special subject areas. The third section of this chapter reviews studies of the organizational structure of elementary schools as this may influence programs of art, music, and physical education. The final section presents role theory as the theoretical basis for this study and considers survey research as a tool for examining roles.

Utilization of Specialist Personnel

Given a group of children with various learning needs and interests, a facility with its limitations, a budget, and the educational priorities of a community, an administrator works to organize a staff which can accommodate all aspects of the given factors. The result is an arrangement of personnel who fulfill the necessary roles needed to accomplish the task of educating children. Music, art, and physical education are one aspect of the total curriculum of the school, but personnel for these areas need to be considered when planning the total staffing arrangement of a school. Whether a school chooses to employ

a music specialist, an art consultant who works together with classroom teachers, or a physical education supervisor who does no regular teaching depends to some extent upon the factors cited above. The utilization of specialist personnel and the involvement of classroom teachers in art, music, and physical education do vary from school system to school system and that variety of staffing arrangements has been the focus of position papers and research studies reviewed here.

The utilization of specialist personnel has been the topic of position papers in art, music, and physical education, but research investigating the effectiveness of, or achievement under, specific staffing arrangements has been undertaken principally in the area of music. Four studies in music and one study in physical education focus on the utilization of specialist personnel. Several authors in art education publications expressed concern for this topic, but no research was identified that specifically dealt with the use of specialist personnel in art.

The Music Educators National Conference has published a position paper on the music specialist in the elementary school (1972); the National Commission on Instruction (1974) prepared a document entitled "The School Music Program: Description and Standards"; and the Commission on Teacher Education issued a report which identified the musical competencies of classroom teachers (1971). In the position paper on the music specialist in the elementary school, the National Commission on Instruction (1972) made the following recommendation:

The nature of music, the importance of arts experiences for all children, the significance of aesthetic education in the life of the

individual, and the variety of musical objectives that emanate from these concerns indicate that satisfactory instructional leadership can best be provided by specialists (p. 60).

A music specialist is a person who has a music education degree or a strong minor or second major in music. The standards for staffing a basic music program include a music teaching staff sufficient to provide twenty minutes of music instruction daily for each child in grades K-3 and forty minutes daily in grades 4-6 (National Commission on Instruction, 1974).

The specialist may be assisted by classroom teachers who can create an atmosphere favorable to music and by those who carry on music activities between visits by the specialist. Classroom teachers need to be prepared to use music to "accommodate the expressive needs of children and to illuminate other disciplines of the school curriculum" and therefore should develop minimal musical competencies including:

1. Skills in making sounds
 - a. make music by singing or playing an instrument
 - b. conduct music
2. Skills in organizing sounds
 - a. guide the creative experiences of children
 - b. utilize simple procedures in composing music
 - c. utilize various kinds of notation
3. Skills in hearing sounds
 - a. perceive the basic sound-events of music
 - b. respond physically to music
 - c. be receptive to music
4. Skills in teaching
 - a. guide students in musical experiences
 - b. utilize resources (Commission on Teacher Education, 1971, pp. 40-41).

The Music Educators National Conference acknowledged that variations in staffing arrangements are usually attributed to whether the priorities

of a given school system provide for the employment of full-time teaching specialists, rather than employing consultants or supervisors who are expected to have limited contact with students.

Hermann (1962) and Circle (1971) studied the effectiveness of several staffing arrangements in music in which the involvement of specialists and classroom teachers varied. Hermann examined four organizational plans used in teaching music in the elementary school to determine which plan was best for fostering children's sight-reading ability. In Plan I, music was taught by the classroom teachers with a consultant available and the principal acting as a supervisor. In Plan II the classroom teacher was responsible for teaching music with regularly scheduled visits from a director of music. Plan III consisted of classroom teachers teaching music in grades one to three and specialist teachers teaching in grades four to six, all supervised by a director of music on a regular schedule. Plan IV utilized a music specialist teacher in grades one to six with the principal acting as a supervisor. The results of the study showed that children in Plan III, the combination plan, excelled on the Knuth Achievement Test in Music and in singing an unfamiliar German folk song at sight.

Circle (1971) investigated the music achievement of sixth grade students in selected schools in Kansas to determine whether or not significant differences emerged as a function of staffing arrangement. The Colwell Music Achievement Tests 1 and 2 were administered to three groups of students: those taught by classroom teachers only, those taught by music specialists and classroom teachers, and those taught

solely by music specialists. Circle found significant correlations between the students taught by classroom teachers and music specialists together and the students' scores on the Music Achievement Test.

The size of the community was a factor in the utilization of specialist personnel in Nebraska and the size of the school was a factor in Texas. Thomas (1962) investigated staffing arrangements for teaching music in elementary schools in Nebraska to determine which staffing arrangements were being used and which staffing arrangements were favored by administrators, classroom teachers and music specialists. He found that the majority of respondents (78 music specialists, 295 principals, and 330 classroom teachers) teaching in schools located in towns of less than 5,000 population, reported that music specialist teachers taught all the classroom music. Elementary schools in towns of over 5,000 used a combination classroom teacher/music specialist staffing arrangement in grades one to six.

Bozarth (1962) studied elementary school size as it related to special subject area programs. Using questionnaires and site visits, he collected data pertaining to the provision for and utilization of personnel and facilities in art, music, physical education and library in Texas elementary schools, using pupil enrollments as a basis for grouping schools. However, Bozarth did not attempt to differentiate between schools with specialist teachers and those with consultants, but referred to both types as specialists. He found that 15 percent of 1,489 schools had art specialists, 57 percent had music specialists, 28 percent had physical education specialists and 40 percent had no

special teachers. He also found that the best provision for and utilization of specialists and facilities were most consistently associated within the school enrollment range of 700-799 pupils. It appears that the results of these two studies do not agree. However, it is possible for large schools to exist in small communities if outlying areas are included in a consolidated school district. It is also possible that the educational priorities in Nebraska and Texas differ and therefore could account for the conflicting results.

In 1971 the Elementary School Physical Education Commission of the American Association of Health, Physical Education, and Recreation's Physical Education Division issued a position paper on the essentials of a quality elementary physical education program, including a section on the role of the specialist teacher. In the paper, the Commission recommended that teachers of elementary physical education understand human movement, child growth and development, current learning theories, and be able to work effectively with children. The physical education teacher should also be an involved and contributing member of the school staff and should work together with the classroom teacher. Although the specialist teacher assumes the primary role in conducting the physical education program, he should regard himself as only one part of the total education process. When classroom teachers teach physical education it is important that they be provided with regular leadership and guidance from physical education resource people. In schools with differentiated staffing, physical education teachers should be included in the planning, teaching, and evaluating of team

goals and should work with the administration in developing guidelines for the utilization of professional specialist personnel.

Koss (1965) constructed a checklist to evaluate physical education programs in elementary schools in New Jersey in the areas of philosophy, personnel, curriculum, activities beyond the in-class program, and time, space, equipment, and facilities. Koss surveyed 450 school districts in the preliminary stages of her study and found that 33 percent of the New Jersey school districts had no physical education personnel and that when specialists were available to teach a physical education class, nearly 60 percent of the classroom teachers left the room. Koss then identified two groups of 13 schools which most completely and least completely fulfilled criteria established as a result of the evaluation checklist. She collected in-depth data from the 26 selected schools through interviews and on-site observations and found that administrators desiring sequential skill instruction recognized the importance of employing a special teacher and that administrators who were more interested in the social-emotional growth of the children relied on classroom teachers to teach physical education.

The National Art Education Association (n.d.) published a position paper on the essentials of a quality school art program and stated that "effective learning in art depends directly upon the competency and enthusiasm of the art teacher." An art teacher must be "more than adequately trained" with a major in art; an art minor program with minimum credit requirements in art studio does not provide the teacher with adequate training. Adequate preparation is also necessary for classroom teachers since the "need to use visual expression often

arises in learning situations outside the art room" and because classroom teachers and specialists share the responsibility for the kind and quality of art experiences available to children.

In its guide entitled, "Organizing the Environment for Art Instruction Grades K-12," the Wisconsin Department of Public Instruction (n.d.) suggested two possible approaches for scheduling the elementary art specialist: the departmentalized approach and the resource approach. In the departmentalized approach, an elementary art teacher is responsible for the major portion of the child's art education and should be scheduled for no more than fifteen classes meeting 100 minutes per week with adequate planning and preparation time each day. In the resource approach, the art teacher shares the responsibility for instruction with the classroom teacher and should be scheduled to instruct each class once each week for 45 to 60 minutes with adequate time for consulting with classroom teachers. "It is preferable that the elementary art specialist serve as a resource person in a consulting-teaching role" (p. 17). Even with an art specialist teaching, the classroom teacher has a responsibility to: (1) cooperate in planning a well balanced program, (2) show an interest in and display the children's art work, (3) provide opportunities for creative efforts, and (4) remain in the room while the specialist is teaching.

No research studies dealing with the utilization of art specialist personnel were located. The authors of four articles (Conant, 1964; Saunders, 1964; Anderson, 1969; Keel, 1964) and one pamphlet (Lewis, 1961) in the field of art agreed that the specialist teachers should be

responsible for teaching the art lesson and for providing consultant follow-up assistance to classroom teachers.

Involvement of Classroom Teachers

Music was the focus of research in nine studies of the involvement of classroom teachers in the special subject areas, while researchers in the areas of art and physical education each contributed one and two studies, respectively, to the investigation of this topic.

A survey conducted by the National Education Association (1963) found that in 40 percent of the schools surveyed, classroom teachers taught music with help from a specialist teacher. Classroom teachers were totally responsible for the music program in grades one, two, and three in 40 percent of the schools surveyed. Classroom teachers were expected to teach music alone or with the help of a specialist teacher in approximately 75 percent of the schools; however, in 63 percent of the schools, classroom teachers were not required to have music training as a condition of employment.

Picerno (1970a, 1970b) studied the role of the classroom teacher in elementary school programs in New York State from two perspectives--the opinions of classroom teachers and the opinions of music supervisors. The music supervisors reported that specialist teachers taught 87 percent of the time allotted to music, while classroom teachers reported that the specialist teachers taught only 62 percent of the time allotted to music. Seventy-one percent of the supervisors favored the involvement of the classroom teachers but reported that only 39 percent

of the classroom teachers assumed any responsibility for teaching music. On the other hand, 73 percent of the classroom teachers indicated that they were teaching some music in the classroom. He also found that 83 percent of the classroom teachers were in favor of teaching music themselves with the help of the specialist.

Pendleton (1975) investigated the role of the classroom teacher in the elementary school music program in one school district. The researcher surveyed classroom teachers, music specialists, and principals and made recommendations for other school districts only to the extent other situations matched those presented in this study. In the school district selected for study the administration generally expected classroom teachers to have some teaching skills in music. All three groups surveyed agreed that shared responsibility for classroom music instruction was beneficial for students' musical growth, but that teaching load and daily schedule were the most important factors affecting classroom teachers' music teaching. A major recommendation from the Pendleton study was that classroom teachers and music specialists should cooperatively plan the music program.

Smith (1969), Gabriel (1962), and Picerno (1970a, 1970b) studied the preparation classroom teachers received for teaching music. Smith (1969) found positive relationships between the preparation of the classroom teachers and scores on tests of confidence, attitude, and interest. The more prepared classroom teachers were to teach music, the more interest and confidence they had in teaching music. Gabriel (1962) found that in Tennessee, many classroom teachers felt they were

inadequately prepared to teach music and that in many instances no music was available to elementary school children. Picerno (1970a, 1970b) found that the music supervisors generally believed that classroom teachers were not adequately prepared to teach music. Classroom teachers felt that musical activities requiring specialized skills of the teacher should be taught to the children and over 70 percent of the classroom teachers believed that they had been adequately prepared in college to teach those skills.

Birch (1969), Gelineau (1960), and Evans (1958) were concerned with the extent to which classroom teachers' attitudes toward teaching music influenced their involvement with the subject area. Birch (1969) studied the relationship between the classroom teacher's attitude toward teaching music, his previous musical experience, and his self-confidence in teaching music. He found relationships between attitude and self-confidence and between previous musical experience and self-confidence in music teaching. He also found that student teaching and post-graduate music experiences were significant predictors of attitude toward teaching music.

Gelineau (1960) found that classroom teachers who liked to teach music had had more musical experiences in elementary school, high school and college than did those classroom teachers who did not like to teach music. Evans (1958) also found that increased musical experience in the background of classroom teachers fostered more favorable attitudes toward teaching music.

In the area of art, the 1963 National Education Association survey showed that in 25 percent of the schools surveyed the classroom teachers taught art with help from a specialist. Classroom teachers were totally responsible for the art program in 60 percent of the schools surveyed. Classroom teachers were expected to teach art alone or with the help of a specialist in approximately 85 percent of the schools. However, less than one-third of the school systems required art methods courses as a condition of employment for classroom teachers.

Wesener (1963) studied elementary physical education supervisors in Wisconsin and found that classroom teachers had major responsibility for teaching physical education. He reported that in order to carry out a physical education program, classroom teachers felt that they needed adequate supervision and advisory help from a specialist.

Nokken (1971) reported that classroom teachers believed in the value of physical education and supported the need for specialist teachers in the major teaching role. He found that college experiences related to physical education enhanced a classroom teacher's self-concept regarding his ability to teach physical education.

In reviewing research on the utilization of specialist personnel and the involvement of classroom teachers, it is evident that classroom teachers are teaching art, music, and physical education (NEA, 1963; Picerno, 1970a, 1970b; Wesener, 1963). In those situations where a joint teaching effort by specialists and classroom teachers did in fact occur, that staffing arrangement appeared to be beneficial for students' growth (Circle, 1971; Hermann, 1962; Pendleton, 1975; Koss, 1965). The

classroom teachers' preparation and attitude toward teaching special area subjects were investigated and seemed to be a factor in classroom teachers' involvement in the special subject areas (Gelineau, 1960; Evans, 1958; Birch, 1969; Nokken, 1971). All three position papers noted the importance of specialists and classroom teachers working together for the benefit of the children (NAEA, n.d.; AAHPER, 1971; MENC, 1972). Despite a thorough search of all possible resources, this writer was unable to identify any research studies in art or physical education other than those cited.

Organizational Structure

A school can be organized by grade levels in self-contained classrooms, by units with multiaged groups of students assigned to a group of teachers, or in a variety of arrangements which utilize the strengths of the personnel and the physical layout of the school building. This section describes Individually Guided Education (IGE) and one of its seven components, the multiunit structure, which is the organizational framework in which staffing arrangements in art, music, and physical education were examined for this study. Although art, music and physical education are not often included in studies of organizational structure, three studies reviewed here did focus on organizational structure as it relates to the special area subjects in the elementary school, including one study which examined the differences between the multiunit school and the age-graded/self-contained classroom school.

Individually Guided Education is a comprehensive system of education and instruction designed to produce higher educational achievements, the abilities underlying those achievements, and a healthy self-concept by providing for differences among students in rate of learning, learning style and other characteristics. There are seven interrelated components of IGE as shown in Figure 2.1 which contribute to achieving these aims. The seven components (Klausmeier, 1977) include:

1. The multiunit organization.
2. An instructional programming model for the individual student.
3. Evaluation for educational decision making.
4. Curriculum materials designed for use in the instructional programming model.
5. Home-school-community relations.
6. Facilitative environments.
7. Continuing research and development.

The multiunit organization is the administrative structure in which staffing arrangements in art, music, and physical education are being investigated in this study. The multiunit structure replaces the age-graded/self-contained classroom organization with the Instruction and Research (I & R) Unit. The Instructional Improvement Committee (IIC) includes the principal and unit leaders and acts as an educational decision making body at the building level. The Systemwide Program Committee (SPC) is an addition to present districtwide organizations.



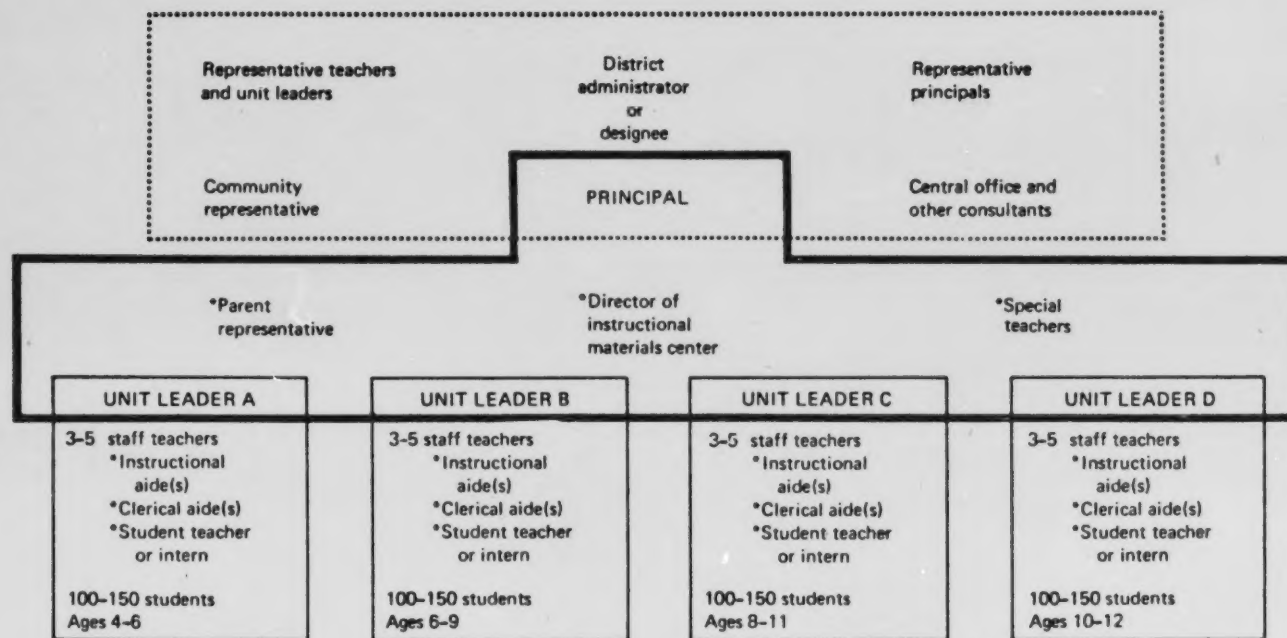
Figure 2.1. Major Components of Individually Guided Education.

Based on: Klausmeier, Quilling, Sorenson, Way, & Glasrud, 1971, Chapter 2.

Each I & R Unit includes a unit leader who also functions as a teacher, three to five staff teachers, formerly known as classroom teachers, possibly instructional or clerical aides and student teachers, and 100 to 150 multiaged children. The main function of each unit is to plan, carry out, and evaluate instructional programs for each student in the unit. Staff teachers spend approximately 90 to 95 percent of each day with the students (Lipham et al., 1977).

The IIC, whose main function is to plan, coordinate, implement and evaluate the school's entire instructional program includes at least the principal and the unit leaders. In the most recent presentation of the organizational model (Klausmeier, 1977), shown in Figure 2.2, the IIC might possibly include parent representatives, the director of the instructional materials center and special teachers. In an earlier model (Klausmeier et al., 1971) special area teachers were considered external consultants having only indirect input into the school's decision making process, as shown in Figure 2.3. Figure 2.4 shows a revised organizational model suggested by the Wisconsin Committee on Music, Art, and Physical Education (MAPE) in IGE which includes a MAPE Unit in addition to the I & R Units.

The MAPE Unit includes art, music, and physical education teachers as well as aides and student teachers. One of the teachers serves as the unit leader and regular member of the IIC. The multiunit structure including a MAPE Unit incorporates a communication network between the art, music, and physical education teachers, a communication link between specialist teachers and the school's I & R Units, designated



— Instruction and Research Unit
 — Instructional Improvement Committee
 - - - Systemwide Program Committee

*Inclusion of these persons will vary according to particular school settings.

Figure 2.2. Multiunit Organization of an IGE School--1977.

Based on: Klausmeier, Morrow, and Walter, 1968, p. 19.

Organizational Chart of a Multiunit School

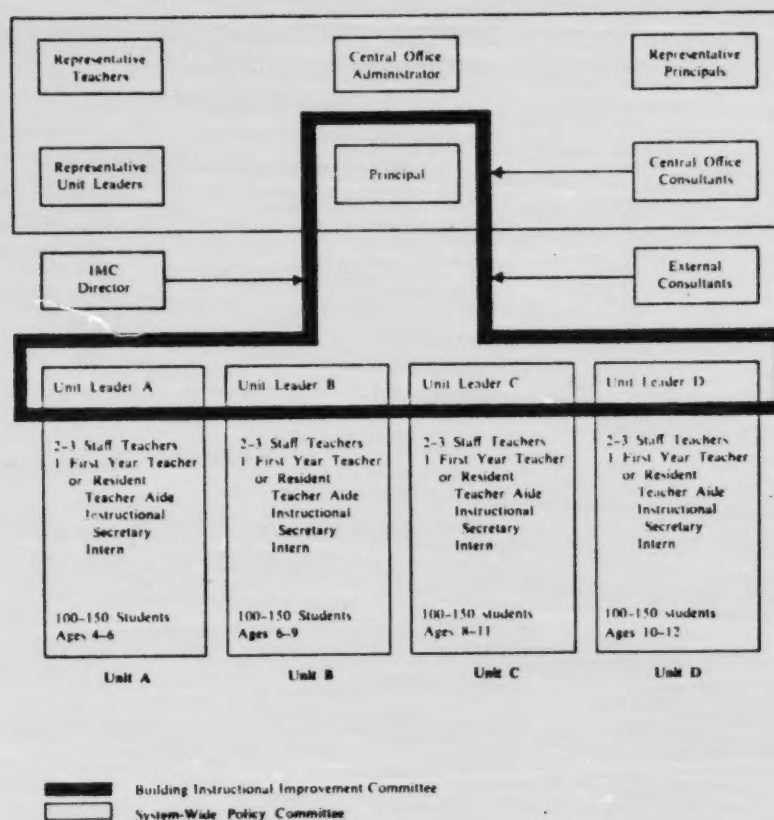


Figure 2.3. Multiunit Organization of an IGE School--1971.

Source: Klausmeier et al., 1971, p. 21.

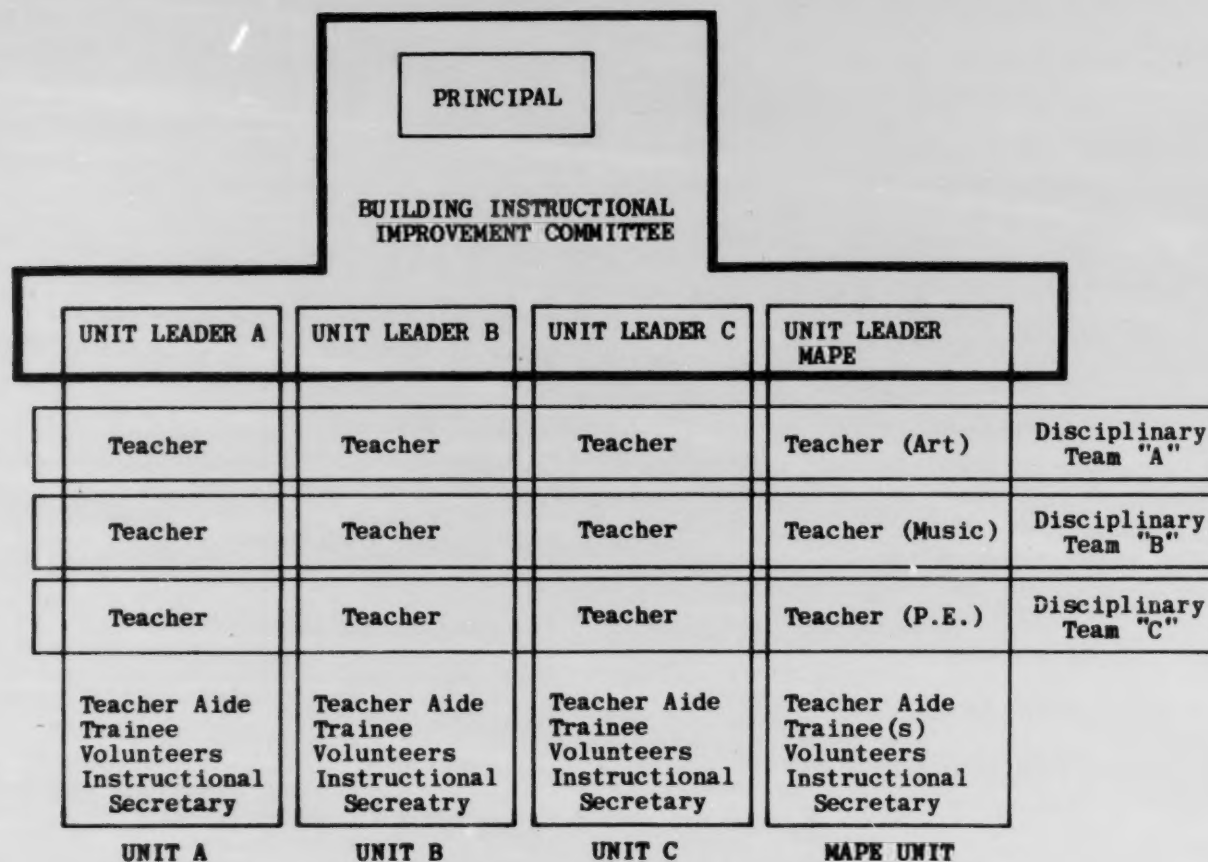


Figure 2.4. Multiunit Organization of an IGE School Including a MAPE Unit.

Based on: Gilpatrick et al., n.d., p. 10.

as the "disciplinary teams," and an opportunity for specialists to serve as regular members of the IIC and participate in the school's decision making processes (Gilpatrick et al., n.d.).

The roles and responsibilities of each staff member in a multi-unit school are different from those in an age-graded/self-contained classroom school. In the multiunit schools, roles are complementary, flexible, and differentiated. The role of the staff teacher has three characteristics which include: (1) planning and working cooperatively with other members of the I & R Unit, (2) teaching many children rather than a fixed number, and (3) having the opportunity to exercise professional judgment. The role of the unit leader is a new role created by the multiunit organization and incorporates responsibilities in three areas: membership in the IIC, leadership in the I & R Unit, and teaching (Walter and Lipham, 1976). Each of the roles in the multiunit organization is defined in specific terms, except for the role of special area personnel. Evers et al. (1975) defined the role of special area personnel in IGE schools to include two responsibilities: plan cooperatively with unit teachers and teach. The role of special area personnel, particularly in IGE schools, needs further explication so that the whole school staff as well as the specialists can better understand and fulfill their role in the IGE school.

Anderson (1973), Brown (1971), and Arends and Essig (1972) studied the organizational structure of schools as it influences teachers in the areas of art, music, and physical education. Anderson

(1973) compared multiunit elementary schools and age-graded/self-contained classroom schools to determine the contribution of organizational structure in communicating goals, administrative/supervisory activities, curriculum and instruction activities, and evaluation activities in art, music, and physical education. She found that the age-graded/self-contained classroom school organization contributed more than the multiunit school organization to accomplishing specified educational goals in the special area subjects.

Brown (1971) found no difference in the way music was taught between non-graded schools and traditional schools. She also found that the concept of "non-graded" was vague and that "non-graded" applied only to core subjects. The reasons Brown cited for not applying a non-graded approach to music included a lack of specific objectives, the lack of time allotted to music, and a lack of appropriate facilities and materials. Arends and Essig (1972) studied specialist teachers not included in the organizational model of continuous progress plan schools. The specialist teachers exhibited role conflict and dissatisfaction with the inflexibility of the instructional program because they were not included in the organizational model and felt they were responsible only for keeping a group of children busy while other children were involved in the "real" school program.

Role Theory

The theoretical basis for this study is provided by role theory, a field which offers a framework for describing and understanding

different aspects of human behavior. Many studies have been made of different occupational groups using role theory as a way of defining what one is to do during the hours of employment or as a basis for a position description for recruiting and hiring new personnel. Knowledge of role theory and its resultant studies can be helpful to better understand, adapt, modify and fulfill a role which has been chosen or assigned, and thus be an agent for affecting change in the individuals in the roles under study (Lipham and Hoeh, 1974).

The concept of role was analyzed and defined by Ralph Linton (1936) as he distinguished between one's status and one's role:

A status, as distinct from the individual who may occupy it, is simply a collection of rights and duties. . . . A role represents the dynamic aspect of a status. The individual is socially assigned to a status and occupies it with relation to other statuses. When he puts the rights and duties which constitute the status into effect, he is performing a role. . . . Every individual has a series of roles deriving from the various patterns in which he participates and at the same time a role, general, which represents the sum total of these roles and determines what he does for his society and what he can expect from it (pp. 113-114).

Thomas and Biddle (1966) defined role as "a behavioral repertoire characteristic of a person or a position; a set of standards, descriptions, norms, or concepts held for the behaviors of a person or a position" (pp. 11-12). A common method for describing one's role is the task approach, listing the role expectations, or normative rights and duties of a person holding a given position.

According to Lipham and Hoeh (1974), roles have four characteristics: (1) they are complementary and interlocking; (2) they are

institutional givens; (3) they are somewhat flexible in that behaviors range from required to prohibited; and (4) roles vary in scope from functionally specific to functionally diffuse. An example of each of these characteristics in the area of specialist personnel staffing arrangements may help clarify the applicability of role theory to this study.

1. Roles are complementary and interlocking. For example, the role of the classroom teacher in teaching social studies is complemented by the work of the art and music teachers when the culture of a country is incorporated into the art and music learning activities. The role of the classroom teacher interlocks with the role of the physical education consultant as they work together to help children who have difficulty with eye-hand coordination.
2. Roles are institutional givens. The role of the classroom teacher in art may be given when a consultant is employed by the institution. The classroom teacher is expected to follow through with the instruction the art consultant presents to the class.
3. Roles are somewhat flexible in that behaviors range from required to prohibited. In one school, classroom teachers may be prohibited from attending art classes because of contractual agreements providing for planning time. In another school the principal may require classroom teachers

to be present during art classes in order to carry through instruction for the children in art.

4. Roles vary in scope from functionally specific to functionally diffuse or from being well-defined to being loosely defined. A school which employs a music specialist may have diffuse expectations for the classroom teachers in music. A classroom teacher may conduct an extensive music program in her classroom, or none at all. A principal in a school which employs a consultant in physical education should have well-defined expectations of what the classroom teachers do to continue the work of the physical education consultant when that person is not available to instruct the children in physical education.

Role expectations for classroom teachers are derived from three sources: historical legal sources, professional literature, and school district policy sources. Role expectations can be examined from two perspectives--self-expectations and another person's expectations. A person's self-expectations for a role can be determined by asking a subject to examine a set of role tasks and to respond for each item, "I am expected to . . ." on an "always" to "never" Likert-type scale. For example, the item, "As a classroom teacher I am expected to include some kind of art activity in the children's daily instruction program," could be answered on a Likert-type scale for one's actual behavior or for one's ideal behavior.

The second method for obtaining information about role expectations is to ask another person--an alter--to examine a list of role tasks and to respond to the statement, "As an art specialist, I expect the classroom teachers in this school to" On the same sample item, "include some kind of art activity in the children's daily instructional program," an art specialist may or may not respond in the same way as a classroom teacher on the "always" to "never" scale. By analyzing a set of role expectations and calculating the difference between self-role expectations and an alter's role expectations, a measure of role agreement or conflict potential may be obtained, as it ranges from complete agreement to complete disagreement.

There are four different types of role conflict with which teachers may be faced:

1. Interrole conflict or disagreement between two or more roles simultaneously fulfilled.
2. Inter-reference-group conflict or disagreement between two or more reference groups.
3. Intra-reference-group conflict or disagreement within a reference group.
4. Role-personality conflict or disagreement between the expectations one holds for a role and one's personality needs (Lipham and Hoeh, 1974).

An example of interrole conflict can be seen with a music specialist who may in some instances be required to function as a specialist teacher, responsible for all the instruction children in a class

receive, while in fact, the music specialist was hired as a consultant to assist classroom teachers in following through on a music program initiated by the specialist. An example of inter-reference-group conflict is evident when a principal and art specialist have different expectations for the role of classroom teachers in art. Intra-reference-group conflict exists when classroom teachers disagree among themselves in their expectations for the role of a physical education specialist. Role-personality conflict can be seen in the classroom teacher who is expected to teach music to a class, but lacks confidence to sing in front of a group.

Within the fourth type of role conflict--role-personality conflict--role satisfaction, role fulfillment, and role adequacy can be studied. The difference or discrepancy scores between a person's actual role expectations and one's personality needs is a measure of role satisfaction; the difference or discrepancy scores between a person's ideal role expectations and one's personality needs is a measure of role fulfillment. A classroom teacher's personality needs may be examined by providing a response to "I need, like, want, or enjoy . . ." for role tasks, such as the sample item, "include some kind of art activity in the children's daily instructional program." The difference or discrepancy scores between a person's actual role expectations and one's idealized role expectations is a measure of role adequacy.

Role adequacy can be seen as one's own determination of effectiveness since "a role incumbent's effectiveness can be measured by

the extent to which his on-the-job behavior meets with the expectations held for the role" (Lipham and Hoeh, 1974, p. 123). A more objective measure of classroom teacher role effectiveness would be obtained by examining the actual role behavior of the classroom teacher as reported by the classroom teacher and contrasting that with the role behaviors the specialist ideally would like to see classroom teachers exhibit (pp. 124-125). Thus, comparing the classroom teacher's report of actual behavior with the specialist's perceptions of the classroom teacher's ideal behavior produces a measure of classroom teacher effectiveness as shown in Figure 2.5 below. In order to obtain this measure of effectiveness, both classroom teachers and specialists would need to respond to identical sets of role tasks, each from his own perspective.

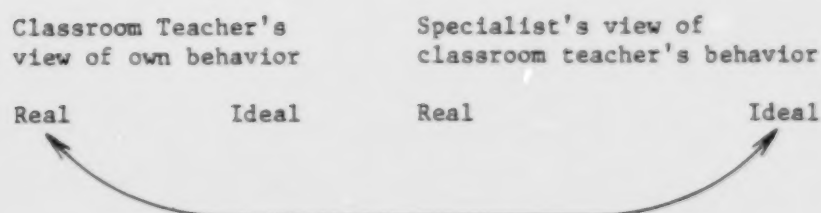


Figure 2.5. Measurement of Classroom Teacher Effectiveness.

Use of Survey Research in Investigating Roles

In investigating a role, questionnaires and interviews are used most frequently to collect data about tasks that are performed, activities that are conducted, and responsibilities that are held (Thomas and Biddle, 1966). The disadvantages of the mail questionnaire outweigh the advantages, but for obtaining data from a relatively large number of subjects, spread over a wide geographical area, no other method of obtaining data is financially feasible. In a mail questionnaire the questions are standardized; they can be answered at the convenience of the respondent, and the informant may answer the questions more frankly than in an interview situation (Parten, 1966). Moser (1958) indicated that mail questionnaires are quicker and cheaper than interviews and that they avoid many problems inherent in the interview process. On the other hand, Kerlinger (1964) indicated that mail questionnaires demand time to obtain an adequate response rate and money for printing and postage.

Kerlinger (1964) noted two serious drawbacks of the mail questionnaire: (1) the possible lack of response, and (2) the inability to check the response given. Kerlinger also indicated that survey information does not penetrate very deeply below the surface; the scope of research is emphasized at the expense of depth. Moser (1958) noted the following disadvantages of survey research: answers must be accepted as final; answers cannot be treated as independent; and no opportunity is available for observational data to be collected. Parten (1966) indicated that the returnees may not be representative

of groups to whom the questionnaire was sent and that the possibility of misinterpreting questions or omitting essential items was great.

Parten (1966) said that checks on the honesty and reliability of returns are difficult to devise. Kerlinger (1964) also indicated that the reliability of attitude responses is difficult to determine because a change in response may signify a real change of attitude. In calculating the reliability of an instrument, Kerlinger stated, ". . . the reliability of average responses is higher than the reliability of individual responses" (p. 401). He also stated that in order to make valid generalizations from the sample to the population, returns of 80 to 90 percent or more are necessary. If that percentage is not obtained, the characteristics of the non-respondents should be studied.

Five studies were found which used questionnaires to analyze the roles of classroom teachers or specialist personnel. Hughes (1971) concluded that specialists showed little interest in the roles of consultant or supervisor, but preferred teaching on a regular basis. Schwartz (1962) reported that there were discrepancies between the ideal role of the art teacher as described in art education literature and the actual teaching situation and concluded that the ideal role of the art specialist was unrealistic. Finan (1971) collected data from classroom teachers about their ideal and actual roles, including the percentage of time devoted to different responsibilities, an assessment of roles that classroom teachers felt should not be a part of their teaching load, and a statement of the teachers' ideal role in terms of percentage of time devoted to different responsibilities.

Mills (1975) studied the role of music supervisors in the public school systems of Georgia using questionnaires distributed to music supervisors, assistant principals or general supervisors, school principals and music teachers in systems employing a music supervisor. The questionnaire included tasks of music supervisors in nine categories. Participants were asked to respond to each task in terms of both current responsibility and desired responsibility. Mills found no standard model for the music supervisors' job since each position reflected the unique characteristics of each school system. However, the following points of agreement were drawn from the various responses: (1) the tasks represented a realistic appraisal of the duties and responsibilities of the music supervisors; (2) general supervisors were most satisfied and music teachers least satisfied with the current role of the music supervisor; and (3) school systems did not clearly define the specific responsibilities of the music supervisor.

Quatraro (1975) examined the relationships between role expectations and perceived performance of the music coordinators in New York State. The "Role Expectation Behavior-Evidenced Questionnaire" consisted of 26 job functions and was administered to the chief school officer, the school board president, the music coordinator and two randomly selected music staff members in selected school districts in New York State. The analysis indicated that there was considerable disagreement among the four respondent groups regarding the role, responsibilities, and authority of the music coordinator. The school board presidents and chief school officers indicated the least amount of

disagreement, while the music coordinators themselves indicated the most disagreement in comparing levels of performance with levels of expectation of the job. The results indicated an apparent lack of clear definition and understanding of the role of music coordinator.

Role theory has been used as the theoretical basis for defining the parameters of different occupational groups, for investigating differences in real and ideal roles, and for studying self and others' expectations for specific roles. The questionnaire is used frequently to collect data concerning roles, responsibilities, tasks and activities. Although there are advantages and disadvantages in using questionnaires, for purposes of this study, the advantages of mail questionnaires outweigh the disadvantages.

Summary

This chapter reviewed studies describing the utilization of specialist personnel and the involvement of classroom teachers in art, music, and physical education. It also included a description of the multiunit organization of the ICE school as well as reviewed studies of organizational structure as it pertains to art, music, and physical education. The final section reviewed role theory as a basis for this study and the use of survey research to obtain data about persons' roles.

CHAPTER III

DESIGN AND METHODOLOGY

Chapter III discusses the purpose of the study, defines the terms to be used in the study, and describes the design of the study and the procedures used for data collection and data analysis. The final sections of the chapter will discuss the limitations and the significance of the study.

Purpose of the Study

The main purpose of this research was to examine the role expectations and role adequacy of classroom teachers, and classroom teachers' perceptions of the specialists' role in art, music, and physical education in selected IGE schools to ascertain whether significant differences might emerge as a function of the independent variable of staffing arrangement. The two principal staffing arrangements in schools participating in this study included: (1) those which utilized specialist teachers, and (2) those which utilized consultants in the fields of art, music, and physical education.

Klausmeier et al. (1971) defined the role of staff teachers in IGE schools, but did not identify any staff teacher responsibilities in the areas of art, music, and physical education. Instruction in art, music, and physical education has been the responsibility of "external consultants" where they exist, or has been neglected due to

constraints of time and rigid grouping and scheduling practices (Petzold, 1977). To date, no research effort has defined the roles of classroom teachers as they may have instructional responsibilities in the areas of art, music, and/or physical education. The results of this study may provide classroom teachers with a set of role expectations which will help them better understand and fulfill a possible role in art, music, and physical education programs and thus better meet the needs of students in these areas.

Definitions

For purposes of this study the following definitions were used:

1. Specialist teacher--provides all of the instruction children receive in art, music, or physical education. The amount of teaching done by classroom teachers in these three subject areas is optional and generally minimal.
2. Consultant--may serve several schools and provides most of the instruction the children receive in art, music, or physical education. The classroom teachers, with the guidance and supervision of the specialist, may be expected to continue the instruction initiated by the consultant.
3. Supervisor--does no regular teaching but provides assistance to classroom teachers who may be expected to teach art, music, and physical education.
4. Classroom teacher/staff teacher--used synonymously to designate a certified professional who is responsible for 90 to

95 percent of children's daily instruction in the academic areas of the curriculum.

5. Staffing arrangement--the assignment of responsibilities to personnel in order to fulfill specified roles in accomplishing the task of educating children. In the special subject areas, the staffing arrangements could include specialists, consultants, or supervisors and/or classroom teachers organized in various ways to fulfill specific tasks in meeting the needs and interests of children in art, music, and physical education.
6. Real role--behaviors actually exhibited by a teacher in fulfilling specified role tasks.
7. Ideal role--behaviors a teacher believes should be exhibited in fulfilling specified role tasks, assuming the existing staffing arrangement in that school. The teachers' other responsibilities would remain unchanged.
8. Role adequacy--the difference between the classroom teacher's perceptions of one's real role and one's ideal role (Lipham and Hoeh, 1974).

Hypotheses

The problems investigated in this study are based on the definitions given above and in terms of the following null hypotheses:

1. There are no differences in the real role of classroom teachers in the areas of art, music, and physical education

as viewed by classroom teachers that can be attributed to staffing arrangements, utilizing specialist teachers or consultants.

2. There are no differences in the ideal role of classroom teachers in the areas of art, music, and physical education as viewed by classroom teachers that can be attributed to staffing arrangements, utilizing specialist teachers or consultants.
3. There are no differences in role adequacy of classroom teachers in the areas of art, music, and physical education as viewed by classroom teachers that can be attributed to staffing arrangements utilizing specialist teachers or consultants.
4. There are no differences in the real role of specialist personnel as viewed by classroom teachers which can be attributed to staffing arrangements utilizing specialist teachers or consultants.
5. There are no differences in the ideal role of specialist personnel as viewed by classroom teachers which can be attributed to staffing arrangements utilizing specialist teachers or consultants.

The following ancillary questions were also investigated:

1. Do differences exist in the real and ideal roles and role adequacy of classroom teachers which can be attributed to subject area?

2. Do differences exist in the classroom teachers' perceptions of the real and ideal roles of specialists which can be attributed to subject area?
3. Is there a relationship between classroom teachers' confidence in teaching art, or music, or physical education and their real role behavior in art, or music, or physical education?
4. Is there a relationship between classroom teachers' perceptions of program effectiveness and the classroom teachers' real role behavior?
5. Is there a relationship between classroom teachers' perceptions of program effectiveness and the classroom teachers' perceptions of specialists' real role behavior?
6. Is there a relationship between classroom teachers' perceptions of program effectiveness and the combined real role behaviors of classroom teachers and specialists?
7. Is there a relationship between specific real role behaviors and staffing arrangements and/or subject area?

Survey Instrument

One questionnaire, modified to accommodate the three special subject areas (Appendix A), was developed to collect information from classroom teachers concerning their role and their perceptions of the role of the specialist personnel in art, or music, or physical education. The questionnaires consisted of three sections:

1. A list of possible tasks performed by classroom teachers in the designated area.
2. A list of possible tasks performed by specialist personnel in the designated area.
3. Teacher and school background information.

Each set of tasks required two frequency-type responses to each item: one for actual behavior and the other for ideal behavior.

The items were selected from a pool of items identified in questionnaires dealing with the roles of specialists, principals, unit leaders, and classroom teachers (Petzold, 1977; Evers, 1974; Sheridan, 1974; and Gramenz, 1974) and from literature in each of the three subject areas (Andrews, Saurborn, and Schneider, 1960; Bessom, 1969; Dauer and Pangrazi, 1975; Forsythe and Duncan, 1951; Klotman, 1973; National Art Education Association, 1972; Sawyer and deFrancesco, 1971; and Snyder, 1959). In constructing and selecting items for the questionnaires, content validity, embedded in the question, "Does this item measure what we think it measures?" was a major guiding principle (Kerlinger, 1964, p. 445). Potential survey items were collected from the data sources cited above and included an analysis of organizational and instructional tasks for both classroom teachers and specialists based on items from the 1974 Classroom Teacher and Specialist Questionnaires (Petzold, 1977). Sixteen items from the 1974 Classroom Teacher Questionnaire and 28 items from the Specialist Questionnaire had statistical means indicating major agreement or consensus among classroom teachers or specialists on that particular task. The items were

refined, consolidated and clarified, based on discussions with the researcher's dissertation committee, classroom teachers and specialists currently employed in IGE schools, and based on the researcher's background in working in and with IGE schools. From this pool of items, 53 items were accepted for the Classroom Teacher Questionnaire. Two Likert-type scales were used for the response format. The first 42 items used an "always" to "never" response on a seven-point scale, and also provided zero for a "does not apply," "would not apply," or "I don't know" response. Items 43 to 53 used a seven-point frequency response from "more than once a week" to "never," plus zero for an "I don't know" response. Respondents were encouraged to complete all items.

The questionnaires were pretested with fifteen subjects in the spring of 1976. An evaluation sheet asked for comments and for items that were difficult to answer, those which did not fit the frequency codes and for additional items. The questionnaires were also reviewed by members of the Wisconsin MAPE (music, art, physical education) Committee sponsored by the Department of Public Instruction. No revisions were suggested by the Committee members.

Population and Sample Selection

The population under study included classroom teachers in approximately 1,150 elementary schools listed on the 1975 computerized directory of IGE schools maintained by the Wisconsin Research and Development Center for Cognitive Learning. A "Principal Questionnaire"

(Appendix B) was sent to 956 schools in October, 1975, to identify the type of staffing arrangements for art, music, and physical education in each of these schools. Two hundred of the 1,150 IGE schools had participated in a previous study (Petzold, 1977), and it was decided not to invite them to participate a second time. As shown in Table 3.1, the response rate of 71 percent included 594 usable responses and 87 unusable responses for a total of 681 returned questionnaires. Of the

Table 3.1
RESPONSE RATE FOR PRINCIPAL QUESTIONNAIRE

Type of Response	N	Percent
Usable responses	594	62
Missing information	31	3
Lower elementary only	17	2
Non-IGE schools	15	2
Miscellaneous	10	1
Middle schools	9	1
Upper elementary only	4	*
Previous study	<u>1</u>	<u>*</u>
Total returned	681	71
Not returned	<u>275</u>	<u>29</u>
Totals	956	100

* Less than one percent

594 usable responses to the Principal Questionnaire, two-thirds (382) of the schools used the same staffing arrangement for all three subject areas. The remaining one-third of the schools used different staffing arrangements in art, music, and physical education as shown in Table 3.2.

The following criteria were adopted in seeking IGE schools to participate in the study:

1. The entire IGE school must be organized into the multiunit school structure with Instruction and Research Units and an Instructional Improvement Committee.
2. The school must include at least grades one to five.
3. The school must employ specialist teachers or consultants or supervisors in all three areas.

The Evaluation Section of the Wisconsin Research and Development Center distributed the "IGE Schools Questionnaire--March, 1976" (Zajano and Stewart, 1976), asking for information concerning each school's status as an IGE school. The responses to that questionnaire provided the information necessary to determine whether a school met the first criterion. The appropriate responses were recorded for 81 schools considered to be in the consultant category for sample selection purposes, including 64 schools which employed consultants in all three areas, four schools which employed supervisors in all three areas, and 13 schools which employed consultants in two areas and a specialist in the third area. In the consultant category, instruction in art, music, and physical education is assumed to be a cooperative

Table 3.2

STAFFING ARRANGEMENTS IN ART, MUSIC, AND PHYSICAL EDUCATION
FOR 594 SCHOOLS RESPONDING TO THE PRINCIPAL QUESTIONNAIRE

Staffing Arrangement	N	Percent
Specialist teachers in all three areas	287	48
No specialist personnel in one area	86	14
Consultants in all three areas	64	11
Different staffing arrangements for upper and lower grades	55	9
No specialist personnel in any area	27	5
Specialists in two areas, consultant in the third area	25	4
No specialist personnel in two areas	24	4
Consultants in two areas, specialist in the third area	13	2
Supervisors in two areas, specialist or consultant in the third area	7	1
Supervisors in all three areas	4	*
Supervisor or consultant or specialist in each area (all different)	<u>2</u>	<u>*</u>
Totals	594	98**

* Less than one percent

** Due to rounding error

effort between classroom teachers and specialists. Criterion 2, the inclusion of grades one to five, and Criterion 3, the staffing arrangement category, were determined by responses to the Principal Questionnaire. Forty-three of the consultant schools met the criteria adopted for the study. Schools from the pool of 287 schools reportedly served by specialists were chosen at random until 43 schools were identified which met the criteria adopted for the study.

Letters were sent in November, 1976, to the principals of the 43 consultant schools and 43 specialist schools meeting the criteria for inclusion in the study, for a total of 86 schools. The letter (Appendix C) described the purpose and design of the study and invited the participation of the school staff--classroom teachers and specialists. Six weeks later a follow-up letter was sent to principals who had not responded to the first letter. Doubtful responses and questions were followed up with a telephone call and principals were personally encouraged to invite their staffs to participate in the study. The staffs of ten schools chose not to participate in the study because of other time-consuming commitments. Six schools had closed indefinitely because of poor weather conditions. Three schools were no longer IGE and 20 other schools failed to offer reasons for not participating in the study. The principals of 24 specialist schools and 23 consultant schools indicated that their staffs would be willing to participate in the study.

The principal provided the names of three teachers in each participating instructional unit--one interested in art, one in music,

and one interested in physical education. The number of instructional units per school varied from two to six depending on the size of the school and the number of participating units from each school depended on the interest and willingness of the teachers. A total of 399 subjects were involved in the study, distributed equally among the areas of art, music, and physical education. Of the 133 instructional units, 71 were in consultant schools and 62 were in specialist schools.

Procedures for Data Collection

The questionnaires were mailed in packets to each principal in February, 1977. The packet included a brief introductory letter, a list of teachers participating in the study, a postcard to be returned to the Research and Development Center upon receipt of the packet, and envelopes addressed to each teacher containing the appropriate questionnaire. Follow-up procedures included:

1. A telephone call four weeks after the initial mailing to schools which had not responded, encouraging principals to have the questionnaires distributed and/or returned as quickly as possible.
2. A telephone call six weeks after the initial mailing to schools to identify teachers who had not yet returned the questionnaires.
3. A second questionnaire mailed to non-respondents indicating that the first questionnaire had not been received by the researcher.

Subjects were encouraged to return blank questionnaires if they were not able to answer the questions. Two months after the initial mailing the response rate was 79 percent (316 out of 399). Seventeen questionnaires were unusable due to missing data, including those questionnaires returned blank. Thirty classroom teachers from three schools did not receive their questionnaires because the principals failed to distribute the instruments.

As the questionnaires were returned to the Center, the researcher recorded that the questionnaire had been received and each questionnaire was checked for clear responses and amount of missing data. The "Informed Consent Form" (Appendix D), a document required by the University of Wisconsin School of Education and the National Institute of Education that must be included with every data collection instrument to be read and signed by each participant in a study, was separated from the questionnaire and filed.

In checking responses by school, the researcher became aware that the principal, specialist, and classroom teachers did not always agree on the classification of the school as either a specialist or a consultant school. The schools were originally classified according to the principal's interpretation of the three definitions provided for responses on the Principal Questionnaire. It was necessary to create a set of criteria to insure that in analyzing the data, all classroom teachers and specialists from the same school in the same subject area were placed in the same staffing arrangement category. The following criteria for verifying staffing arrangement categories were applied to

each set of school responses in each area separately.

1. If a principal and the specialist agreed on the classification of the school, the subject area retained its original classification.
2. If the specialist and all of the classroom teachers agreed, even if the principal disagreed on the classification of the school, the classification of the subject area was changed to agree with the specialist and classroom teachers.
3. In cases of disagreement between the specialist and principal, and among classroom teachers, Item 56 of the classroom teacher instrument was compared with Item 57 of the specialist instrument to determine the type of responsibility assumed by the classroom teachers.
 - a. If the specialist indicated that classroom teachers had no responsibility and in the majority of responses classroom teachers reported having responsibility independent of the work of the specialist, the school was classified as a specialist school in that subject area.
 - b. If the specialist indicated that the classroom teachers had responsibility and in the majority of responses classroom teachers reported having responsibility either independent of or complementary to the work of the specialist, the school was classified as a consultant school in that subject area.

Because of the differences in the perceptions of the principals, specialists and classroom teachers, and because of unreturned questionnaires, the number of subjects in each type of school and in each subject area are not approximately equal as originally intended, but are distributed as shown in Table 3.3.

Table 3.3
NUMBER OF CLASSROOM TEACHERS PARTICIPATING IN THE STUDY
BY SUBJECT AREA AND STAFFING ARRANGEMENT

Staffing Arrangement	Subject Area			
	Art	Music	P.E.	Total
Specialist	28	39	44	111
Consultant	76	58	51	185
Total	104	97	95	296

Statistical Procedures

Five sets of scores were calculated for each respondent by summing the responses, ranging from zero to seven for each item, to various groups of items in the following manner:

1. Items 1R to 23R--real behavior--were summed and considered a measure of the classroom teacher's real role behavior.

2. Items 1I to 23I--ideal behavior--were summed and considered a measure of the classroom teacher's ideal role behavior.
3. The sum of the differences between the classroom teacher's ideal role behavior and real role behavior for Items 1 to 23 were considered a measure of the classroom teacher's role adequacy, as shown in the following formula:

$$RA = \sum_{n=1}^{23} (I_n - R_n)$$

4. Items 24R to 42R--real behavior--were summed and considered a measure of the classroom teacher's perceptions of the specialist's real role behavior.
5. Items 24I to 42I--ideal behavior--were summed and considered a measure of the classroom teacher's perceptions of the specialist's ideal role behavior.

These scores were used to test the five null hypotheses and to answer the first two ancillary questions by means of a two-way analysis of variance. Differences between staffing arrangements and among subject areas were determined, as well as interactions between staffing arrangements and subject areas. The analysis was performed using PROGRAM NWAY1, a STATJOB program available at the Madison Academic Computing Center.

Correlations were calculated using the STATJOB program, DSTAT2, to answer the third, fourth, fifth, and sixth ancillary questions.

1. The response to the confidence question--Item 59a, "Considering your own background and experience, how confident

do you feel about teaching _____ [art, or music, or physical education] to your students?"--was correlated with the measure of the classroom teacher's real role behavior, Items 1R to 23R.

2. The response to the effectiveness question--Item 60, "In terms of meeting the _____ [art, or music, or physical education] needs and interests of the children in your unit, how would you rate the effectiveness of the _____ [art, or music, or physical education] program in your school?"--was correlated with:
 - a. the classroom teacher's real role behavior--Items 1R to 23R;
 - b. the classroom teacher's perceptions of the real role behavior of the specialist--Items 24R to 42R; and
 - c. the real role behaviors of the classroom teacher and classroom teacher's perceptions of the specialist's real role behaviors combined to obtain a measure of effectiveness for each special subject area program--Items 1R to 42R.

The seventh ancillary question was answered by calculating the Spearman Rank-Order Correlation using the following formula:

$$\rho = \frac{1 - 6\sum D^2}{N(N^2 - 1)}$$

where D = the difference score between each X and Y pair, N = the number of pair scores (Bruning and Kintz, 1968, p. 156).

Missing data were replaced with the median for each item because the median is less influenced than the mean by extreme responses. The medians were obtained using the STATJOB program, UNISTAT2, and missing values were replaced using PROGRAM REPLACE, a computer program written by Christopher R. Forrest (1974) for the purpose of replacing blank data with any given value. Frequencies and percentages, and means and standard deviations were calculated for each item for descriptive purposes using the STATJOB program, CROSTAB2.

The reliability measures were calculated for each set of items using PROGRAM LERTAP--Laboratory of Education Research Test Analysis Package--written for the Venezuelan Ministry of Education and the Laboratory of Education Research of the University of Colorado and available at the Madison Academic Computing Center. LERTAP estimates the reliability of a test or subtest by using the analysis of variance algorithm suggested by Hoyt, as well as Cronbach's Coefficient Alpha, the most commonly employed estimate of reliability (Nelson, 1974). The results of the reliability calculations, as well as the results from the other statistical procedures, will be reported and discussed in the next chapter.

Limitations of the Study

There were three limitations of this study. First, the study was limited to classroom teacher involvement in only the areas of art, music, and physical education. Second, the study was limited by the sample selection criteria: (1) the same staffing arrangement in all

three subject areas (with five exceptions); (2) the presence of grades one to five in the school; and (3) criteria which were followed in determining whether or not a school could be considered an IGE school. Third, the study was limited by the fact that all results of the study are predicated on the assumption that the data reflect truthfulness in the subjects' responses.

Significance of the Study

Because the role of the classroom teacher in IGE schools has been defined with no responsibilities in art, music, or physical education delineated, these areas have been delegated to external consultants or neglected due to time and organizational constraints. The results of this study will define the role of the classroom teacher in art, music, and physical education in two different settings to provide classroom teachers with a set of role expectations which will allow them to better understand, adapt, modify and fulfill the role which they have chosen or which has been assigned by the school administration.

Summary

In Chapter III, the design and methodology of the study were discussed, including the purpose of the study, the definitions of terms used in the study, a description of the survey instrument, a discussion of the population and sample selection, procedures used for data collection, and the statistical procedures used for analyzing the data. The

last part of the chapter discussed the limitations and the significance of the study. Chapter IV will discuss the results of the analyses.

CHAPTER IV

ANALYSIS OF THE DATA

Chapter IV is composed of four sections. The first section discusses the reliability of the Classroom Teacher Questionnaire while the second section presents the results of the analyses of variance used to test the major hypotheses dealing with staffing arrangements. The third section presents the results of the analyses of variance used to test the first two ancillary questions dealing with differences attributed to subject area and the results of the correlations used to examine the remaining ancillary questions. The final section of this chapter reports descriptive data obtained from tabulating school and background information.

Reliability of the Instrument

The reliability of the Classroom Teacher Questionnaire, reported in Table 4.1, was estimated after the data had been collected for the main study because of numerous changes in the pilot instrument and the limited number of respondents ($N = 15$) in the pilot study. The computer program, LERTAP, was used to calculate the estimate of reliability based on internal consistency or the average correlation among items. Program LERTAP computes both Hoyt's Estimate of Reliability and Cronbach's Coefficient Alpha. When examining the statistics of each section of an instrument, the index of both estimates is identical;

Table 4.1
 RELIABILITY ESTIMATES FOR THE
 CLASSROOM TEACHER QUESTIONNAIRE

Classroom Teachers' Real Role (Items 1R to 23R)		.90
Classroom Teachers' Ideal Role (Items 1I to 23I)		.91
Specialists' Real Role (Items 24R to 42R)		.83
Specialists' Ideal Role (Items 24I to 42I)		.84
School Information--Real (Items 43R to 53R)		.69
School Information--Ideal (Items 43I to 53I)		.79
Totals	Alpha	.79
	Hoyt	.95

however, different values may be obtained for the estimate of reliability for a total instrument.

Hoyt's Estimate of Reliability and Cronbach's Coefficient Alpha approach the reliability of the total instrument in two different ways. Hoyt's Estimate of Reliability does not take into consideration the reliability of the separate sections of the total instrument, but considers all of the items on an instrument together. For example, for the Classroom Teacher Questionnaire, the reliability was calculated for

all 106 items together--Items 1R to 53R and Items 1I to 53I. Cronbach's Coefficient Alpha considers the reliability of each section of the instrument and determines the apparent consistency among the sections. In the Classroom Teacher Questionnaire, the reliabilities of the six sections of the instrument ranged from .69 for "School Information--Real" to .91 for "Classroom Teachers' Ideal Role." Nelson (1974) noted that the Hoyt total instrument reliability coefficient should be interpreted with caution. Both reliability coefficients for the total instrument are reported here so that the differences between the two approaches, in terms of the separate sections of the instrument and the total instrument, can be compared.

Spuck (1971) indicated that alpha coefficients below .50 are of questionable reliability; those between .50 and .70 have sufficient reliability for early stages of research; and those above .70 have a high degree of reliability. The reliability levels obtained for the Classroom Teacher Questionnaire exceeded the level Spuck considered adequate for an instrument's internal consistency.

Tests of Major Hypotheses

A two-way analysis of variance was used to test the five major hypotheses dealing with differences attributed to staffing arrangements. This technique was used rather than a one-way analysis of variance on each set of variables, not only because the two-way analysis permits the study of interactive effects of independent variables on dependent variables, but is more precise than the one-way analysis

of variance since more of the total variance can be identified (Kerlinger, 1964). Table 4.2 presents the means and standard deviations for both staffing arrangement and subject area variables investigated in the major hypotheses and the first two ancillary questions. Table 4.2.1 contains the means and standard deviations for the sum of Items 1 to 23, the real and ideal role behavior of classroom teachers. Table 4.2.2 contains the means and standard deviations for the sum of Items 24 to 42, the classroom teachers' perceptions of the specialists' real and ideal role behavior. Tables 4.3 to 4.7 contain summaries of the analyses of variance calculated for each set of dependent variables for both the staffing arrangement and subject area variables.

Hypotheses 1, 2, and 3: Role Behavior of Classroom Teachers

Hypotheses 1, 2, and 3 dealt with the role behavior of classroom teachers. The real role behavior of classroom teachers was measured by summing the frequency-like responses to 23 task items which the classroom teachers reported they actually did in their schools. Their ideal role behavior was measured by summing the responses to the same 23 task items using, "I should do this task . . ." as the stem of the item. The role adequacy of each classroom teacher was calculated by subtracting the sum of the responses to the real role behavior items from the sum of the responses to the ideal role behavior items as shown in the following formula:

$$RA = \sum_{n=1}^{23} (I_n - R_n).$$

Table 4.2.1

MEANS AND STANDARD DEVIATIONS FOR THE REAL AND IDEAL TASK BEHAVIORS
AND ROLE ADEQUACY OF CLASSROOM TEACHERS--ITEMS 1 TO 23

Subject Area	Staffing Arrangement										
	Specialist Schools				Consultant Schools				Total		
	N	Real	Ideal	Role Adequacy	N	Real	Ideal	Role Adequacy	Real	Ideal	Role Adequacy
Art	28	70.29 (27.65)*	90.00 (31.31)	19.71 (18.43)	76	84.68 (22.33)	105.39 (21.82)	20.71 (13.14)	80.81 (24.59)	101.25 (25.51)	20.44 (14.66)
Music	39	54.21 (20.31)	75.82 (27.26)	21.62 (16.33)	58	71.45 (26.31)	93.71 (28.12)	22.26 (16.28)	64.52 (25.43)	86.52 (29.01)	22.00 (16.22)
Physical Education	44	49.30 (32.06)	83.84 (34.70)	34.55 (30.85)	51	72.00 (23.84)	94.49 (27.21)	22.49 (17.66)	61.48 (30.03)	89.56 (31.20)	28.07 (25.25)
Totals	111	56.32 (28.34)	82.58 (31.61)	26.26 (24.36)	185	77.04 (24.76)	98.72 (25.92)	21.69 (15.42)	69.27 (27.98)	92.67 (29.20)	23.40 (19.35)

*Standard deviations are in parentheses

Table 4.2.2

MEANS AND STANDARD DEVIATIONS FOR THE REAL AND IDEAL TASK BEHAVIORS
OF SPECIALISTS AS VIEWED BY CLASSROOM TEACHERS--ITEMS 24 TO 42

Subject Area	Staffing Arrangement					
	Specialist Schools		Consultant Schools		Total	
	Real	Ideal	Real	Ideal	Real	Ideal
Art	59.29 (16.26)*	83.57 (15.62)	60.17 (22.14)	90.86 (14.74)	59.93 (20.65)	88.89 (15.26)
Music	59.49 (15.00)	84.87 (15.49)	58.33 (17.76)	87.38 (16.26)	58.79 (16.63)	86.37 (15.92)
Physical Education	60.27 (23.27)	87.45 (18.85)	66.00 (19.68)	90.37 (18.46)	63.35 (21.49)	89.02 (18.60)
Totals	59.75 (18.82)	85.57 (16.86)	61.20 (20.30)	89.63 (16.29)	60.66 (19.74)	88.11 (16.60)

*Standard deviations are in parentheses

Table 4.3
 ANALYSIS OF VARIANCE OF THE REAL ROLE OF CLASSROOM TEACHERS--
 ITEMS 1R TO 23R

Source of Variance	SS	df	MS	F
Between staffing arrangements	22026.36	1	22026.36	34.38*
Between subject areas	15008.01	2	7504.01	11.71*
Staffing arrangement x subject area	797.30	2	398.65	.62
Within cells	185790.00	290	640.66	
Total	223621.67	295		

*Significant at or beyond .05 level

Table 4.4
ANALYSIS OF VARIANCE OF THE IDEAL ROLE OF CLASSROOM TEACHERS--
ITEMS 1I TO 23I

Source of Variance	SS	df	MS	F
Between staffing arrangements	14392.46	1	14392.46	18.61*
Between subject areas	7739.53	2	3869.77	5.00*
Staffing arrangement x subject area	604.84	2	302.42	.39
Within cells	224330.55	290	773.55	
Total	247067.38	295		

*Significant at or beyond .05 level

Table 4.5

ANALYSIS OF VARIANCE OF THE ROLE ADEQUACY OF CLASSROOM TEACHERS--
ITEMS 1 TO 23

Source of Variance	SS	df	MS	F
Between staffing arrangements	809.07	1	809.07	2.26
Between subject areas	3438.34	2	1719.17	4.80*
Staffing arrangement x subject area	2473.85	2	1236.93	3.45*
Within cells	103865.35	290	358.16	
Total	110586.61	295		

*Significant at or beyond .05 level

Table 4.6
 ANALYSIS OF VARIANCE OF CLASSROOM TEACHERS' PERCEPTIONS
 OF SPECIALISTS' REAL ROLE BEHAVIOR--Items 24R TO 42R

Source of Variance	SS	df	MS	F
Between staffing arrangements	221.76	1	221.76	.57
Between subject areas	900.07	2	450.04	1.15
Staffing arrangement x subject area	559.74	2	279.87	.72
Within cells	113081.74	290	389.94	
Total	114763.31	295		

Table 4.7
 ANALYSIS OF VARIANCE OF CLASSROOM TEACHERS' PERCEPTIONS
 OF SPECIALISTS' IDEAL ROLE BEHAVIOR--ITEMS 24I TO 42I

Source of Variance	SS	df	MS	F
Between staffing arrangements	1204.62	1	1204.62	4.40*
Between subject areas	353.40	2	176.70	.65
Staffing arrangements x subject area	313.54	2	156.77	.57
Within cells	79401.11	290	273.80	
Total	81272.67	295		

*Significant at or beyond .05 level

Hypothesis 1 stated:

There are no differences in the real role of classroom teachers in the areas of art, music, and physical education as viewed by classroom teachers that can be attributed to staffing arrangements, utilizing specialist teachers or consultants.

The mean for the real role behavior of classroom teachers across subject matter areas, the sum of Items 1R to 23R, for the specialist staffing arrangement was 56.32 and the mean for the consultant staffing arrangement was 77.04 as shown in Table 4.2.1. Table 4.3 indicates that the F value ($F = 34.38$) for the sum of Items 1R to 23R reflected significant differences at the .05 level or better in the real role of classroom teachers in art, music, and physical education which can be attributed to staffing arrangements. Thus, Hypothesis 1 was rejected.

Hypothesis 2 stated:

There are no differences in the ideal role of classroom teachers in the areas of art, music, and physical education as viewed by classroom teachers that can be attributed to staffing arrangements, utilizing specialist teachers or consultants.

The mean for the ideal role behavior of classroom teachers across subject matter areas, the sum of Items 1I to 23I, was 82.58 for the specialist staffing arrangement and 98.72 for the consultant staffing arrangement as shown in Table 4.2.1. Table 4.4 indicates that the F value ($F = 18.61$) for the sum of Items 1I to 23I reflected significant differences at the .05 level or better in the ideal role of classroom teachers in art, music, and physical education which can be attributed to staffing arrangements. Thus, Hypothesis 2 was rejected.

Hypothesis 3 stated:

There are no differences in role adequacy of classroom teachers in the areas of art, music, and physical education as viewed by classroom teachers that can be attributed to staffing arrangements utilizing specialist teachers or consultants.

The mean for the role adequacy of classroom teachers, that is, the sum of the difference between their real and ideal roles summed across all classroom teachers and subject matter areas, was 26.26 for the specialist staffing arrangement and 21.69 for the consultant staffing arrangement, as shown in Table 4.2.1. Table 4.5 indicates that the F value ($F = 2.26$) for role adequacy was not significant at the .05 level. Thus, Hypothesis 3 could not be rejected.

The first two hypotheses in which classroom teachers examined their own behavior were rejected, indicating that classroom teachers did indeed view both their real role and their ideal role in the special subject areas in schools served by specialist teachers differently than classroom teachers did in schools employing consultants. The significantly higher means recorded for schools using the consultant staffing arrangement indicates that classroom teachers in consultant schools were more involved in the special subject areas than their colleagues in the specialist teacher schools. The third hypothesis, dealing with role adequacy could not be rejected at the .05 level of significance, indicating that each category of teachers viewed their participation and/or involvement in the special subject areas with the same degree of adequacy.

Hypotheses 4 and 5: Role Behavior of Specialists

Hypotheses 4 and 5 dealt with the classroom teachers' perceptions of the real and ideal role behaviors of specialists in a given school. Classroom teachers were asked to think how frequently they believed the specialist actually performed the tasks given in Items 24 to 42. The sum of the frequency-like responses to those 19 tasks was used as a measure of the real role behavior of specialists as viewed by classroom teachers. The classroom teachers were also asked to indicate how frequently they believed the specialists should perform the tasks given in Items 24 to 42. The sum of the responses to those 19 items was used as a measure of the ideal role behavior of specialists as perceived by classroom teachers.

Hypothesis 4 stated:

There are no differences in the real role of specialist personnel as viewed by classroom teachers which can be attributed to staffing arrangements utilizing specialist teachers or consultants.

The mean for the real role behavior of specialists as perceived by classroom teachers, the sum of Items 24R to 42R, for the specialist staffing arrangement was 59.75 and the mean for the consultant staffing arrangement was 61.20, as shown in Table 4.2.2. Table 4.6 indicates that the F value ($F = .57$) for the real role of specialists was not significant at the .05 level. Thus, Hypothesis 4 could not be rejected.

Hypothesis 5 stated:

There are no differences in the ideal role of specialist personnel as viewed by classroom teachers which can be attributed to staffing arrangements utilizing specialist teachers or consultants.

The mean for the ideal role behavior of specialists as perceived by classroom teachers, the sum of Items 24I to 42I, for the specialist staffing arrangement was 85.57, and the mean for the consultant staffing arrangement was 89.63, as shown in Table 4.2.2. Table 4.7 indicates that the F value ($F = 4.40$) for the sum of Items 24I to 42I reflected significant differences at the .05 level or better in the ideal role of specialists as viewed by classroom teachers which can be attributed to staffing arrangements. Thus, Hypothesis 5 was rejected.

In viewing the real role of the specialist, classroom teachers did not perceive significant differences which could be attributed to staffing arrangement. In examining the means for the specialists' real role, the mean for consultants was slightly higher than for specialist teachers, indicating slightly more involvement on the part of consultants. Although this result appears to be contradictory to the assumed role of the specialist teacher, perhaps classroom teachers who worked more closely with consultants were more aware of the real role behavior of the consultant. The same rationale could be applied to classroom teachers perceiving the ideal role of specialists, where the results were significant. The mean for consultants was higher than for specialist teachers, indicating that classroom teachers viewed consultants as more involved ideally in the given role tasks than specialist teachers.

Tests of Ancillary Questions

Questions 1 and 2: Subject Area Differences

Since the amount of research on classroom teachers' involvement in the special subject areas was greatest in the area of music and very limited in the areas of art and physical education, the question was raised, "Does subject area make a difference in classroom teachers' involvement in the special subject areas, and can studies in music possibly be generalized to apply to the other special subject areas?" Two ancillary questions were posed to investigate this question. A two-way analysis of variance was used to test the first two ancillary questions dealing with differences in the role behavior of classroom teachers and specialists attributed to subject area.

Ancillary Question 1 asked:

Do differences exist in the real and ideal roles and role adequacy of classroom teachers which can be attributed to subject area?

The means for the real role behavior of classroom teachers, the sum of Items 1R to 23R, were 80.81 for art, 64.52 for music, and 61.48 for physical education, as shown in Table 4.2.1 in the "total" column. Table 4.3 indicates that the F value ($F = 11.71$) for the sum of Items 1R to 23R reflected significant differences at the .05 level of significance or better which can be attributed to subject area.

Scheffé post hoc tests were performed using the STATJOB program ONEWAY2, in order to identify the pairwise significance among the mean scores which accounted for the significant F values. The Scheffé confidence intervals which do not include zero help to identify possible

reasons for rejecting a tested hypothesis or question (Marasciulo, 1971). Table 4.8 presents the three possible comparisons for each part of Ancillary Question 1, the mean difference for each comparison, the upper and lower limits of each confidence interval and an indication of the comparison's significance.

Table 4.8

RESULTS OF SCHEFFE' POST HOC COMPARISONS FOR DIFFERENCES IN THE
ROLE BEHAVIOR OF CLASSROOM TEACHERS ATTRIBUTED TO SUBJECT AREA

Comparison	Mean Difference	Confidence Interval Limits		Decision
		Upper	Lower	
Real Role				
Art and Music	16.29	7.05	25.57	Significant
Art and P. E.	19.32	9.99	28.65	Significant
Music and P. E.	3.03	-6.46	12.52	Not Significant
Ideal Role				
Art and Music	14.73	4.81	24.66	Significant
Art and P. E.	11.69	1.71	21.67	Significant
Music and P. E.	3.04	-7.11	13.19	Not Significant
Role Adequacy				
Art and Music	1.56	-5.09	8.20	Not Significant
Art and P. E.	7.63	.95	14.31	Significant
Music and P. E.	6.07	- .72	12.87	Not Significant

The results of the Scheffé test for the real role of classroom teachers indicated that the mean difference of 16.29 between art and music was significant since the Scheffé interval of 7.01 to 25.57 did not include zero. The mean difference of 19.32 between art and physical education was also significant since the Scheffé interval of 9.99 to 28.65 did not include zero. The mean difference of 3.03 between music and physical education was not significant since the Scheffé interval of -6.46 to 12.52 did include zero.

The means for the ideal role behavior of classroom teachers, the sum of Items 11 to 23I, were 101.25 for art, 86.52 for music, and 89.56 for physical education, as shown in Table 4.2.1 in the "total" column. Table 4.4 indicates that the F value ($F = 5.00$) for the sum of Items 11 to 23I, reflected significant differences at the .05 level of significance or better which can be attributed to subject areas. The results of the Scheffé test for the ideal role of classroom teachers indicated that the mean difference of 14.73 between art and music was significant since the Scheffé interval of 4.81 to 24.66 did not include zero. The mean difference of 11.69 between art and physical education was also significant since the confidence interval of 1.71 to 21.67 did not include zero. The mean difference of 3.04 between music and physical education was not significant since the Scheffé interval of -7.11 to 13.19 did include zero, as shown in Table 4.8.

The means for the role adequacy of classroom teachers were 20.44 for art, 22.00 for music, and 28.07 for physical education, as shown in Table 4.2.1 in the "total" column. Table 4.5 indicates that the

F value ($F = 4.80$) for role adequacy, reflected significant differences at the .05 level or better which can be attributed to subject area. The Scheffé post hoc tests for the role adequacy of classroom teachers indicated that the mean difference of 7.63 between art and physical education was significant since the Scheffé interval of .95 to 14.31 did not include zero. The difference in means between music and physical education and between art and music were not significant since their respective Scheffé confidence intervals did not include zero, as shown in Table 4.8.

Table 4.5 indicates that the F value ($F = 3.45$) for the interaction of staffing arrangement with subject area of the role adequacy variable is significant at the .05 level or better. The means for each of the six staffing arrangement categories are given in Table 4.2.1 but are extracted from that table for ease of reference in Table 4.9. The

Table 4.9
MEANS OF ROLE ADEQUACY SCORES FOR
STAFFING ARRANGEMENT BY SUBJECT AREA

Staffing Arrangement	Subject Area		
	Art	Music	P. E.
Specialist Teacher	19.71	21.62	34.55
Consultant	20.71	22.26	22.49

mean for the role adequacy of classroom teachers in the physical education specialist staffing arrangement category is significantly higher than the means for the other five staffing arrangement categories.

The data suggest that differences do exist in the real and ideal roles of classroom teachers which can be attributed to subject area. Since subject area did make a difference in classroom teachers' involvement in art, music, and physical education, the results of the research studies cited in the review of the literature cannot be generalized from music to either art or physical education. The area of art has the largest means for both real and ideal roles, indicating that classroom teachers responding for art were more involved in that special area program than classroom teachers responding for music or physical education. The data also suggest that differences did not exist in the role adequacy of classroom teachers which can be attributed to subject area. Teachers in each subject area viewed their participation and/or involvement with the same degree of adequacy. The exception to this general observation appeared in the significant interaction between staffing arrangement and subject area in which classroom teachers in the physical education specialist staffing arrangement category had a significantly higher mean for role adequacy than the other five staffing arrangement categories. The higher mean for role adequacy indicates that classroom teachers believed they should be doing more in physical education than they were actually doing.

Ancillary Question 2 asked:

Do differences exist in the classroom teachers' perceptions of the real and ideal roles of specialists which can be attributed to subject area?

The means for the real role behavior of specialists as perceived by classroom teachers, the sum of Items 24R to 42R, were 59.93 for art, 58.79 for music, and 63.35 for physical education, as shown in Table 4.2.2 in the "total" column. Table 4.6 indicates that the F value ($F = 1.15$) for the sum of Items 24R to 42R was not significant at the .05 level.

The means for the ideal role behavior of specialists as perceived by classroom teachers, the sum of Items 24I to 42I, were 85.89 for art, 86.37 for music, and 89.02 for physical education, as shown in the "total" column of Table 4.2.2. Table 4.7 indicates that the F value ($F = .65$) for the sum of Items 24I to 42I was not significant at the .05 level. The data suggest that differences did not exist in the classroom teachers' perceptions of the real and ideal roles of specialists which can be attributed to subject area.

Question 3: Classroom Teacher Confidence Correlations

The third ancillary question dealt with classroom teachers' confidence in teaching the special subject areas and their real role in art, or music, or physical education. Pearson product-moment correlation coefficients were calculated using DSTAT2 to provide information related to Ancillary Question 3:

Is there a relationship between classroom teachers' confidence in teaching art, or music, or physical education and their real role behavior in art, or music, or physical education?

The classroom teachers' responses to Item 59a, "Considering your own background and experience how confident do you feel about teaching _____ to your students," ranged on a seven-point scale from "not confident" to "very confident." That response was correlated with the classroom teacher's real role behavior score--the sum of Items 1R to 23R. Table 4.10 contains the correlation coefficients obtained to determine the relationship between classroom teachers' confidence and their real role behavior in the special area subjects for the total sample and for each subject area separately.

Table 4.10

CORRELATION COEFFICIENTS FOR THE RELATIONSHIP
BETWEEN CLASSROOM TEACHERS' CONFIDENCE AND THEIR
REAL ROLE BEHAVIOR IN THE SPECIAL SUBJECT AREAS

Subject Area	<u>N</u>	<u>r</u>
All subject areas	294	.368*
Art	103	.448*
Music	96	.275*
Physical Education	95	.420*

* Significant at .05 level or beyond

Garrett (1966) presented a general guide for interpreting r values in terms of a verbal description. He indicated that an " r from $\pm .20$ to $\pm .40$ denotes low correlation, present but slight; r from $\pm .40$ to $\pm .70$ denotes substantial or marked relationship; r from $\pm .70$ to ± 1.00 denotes a high to very high relationship" (p. 176). Although all four correlation coefficients obtained for Ancillary Question 3 were statistically significant, the practical significance of any of these correlations is questionable. The greatest relationship between confidence and real role existed in the area of art, followed by physical education. Classroom teachers' confidence scores in music were more evenly distributed across the seven point scale than classroom teachers' scores in art or physical education, thus possibly accounting for the lower correlation coefficient. The data suggest that the relationship between classroom teachers' confidence in teaching music and their real role behavior in music is present, but slight. The correlation coefficients for art and physical education are at the low end of the .40 to .70 range denoting "substantial or marked relationship" in Garrett's terms.

Questions 4, 5, and 6: Program Effectiveness Correlations

Questions 4, 5, and 6 dealt with the relationship of classroom teachers' perceptions of the effectiveness of the special subject area programs and the classroom teachers' real role behavior (Items 1R to 23R), specialists' real role behavior (Items 24R to 42R), and the combined real role behaviors of the classroom teachers and specialists (Items 1R to 42R). Pearson Product-moment correlation coefficients

were calculated using DSTAT2 to provide information related to Ancillary Questions 4, 5, and 6.

Ancillary Question 4: Is there a relationship between classroom teachers' perceptions of program effectiveness and the classroom teachers' real role behavior?

Ancillary Question 5: Is there a relationship between classroom teachers' perceptions of program effectiveness and the classroom teachers' perceptions of the specialists' real role behavior?

Ancillary Question 6: Is there a relationship between classroom teachers' perceptions of program effectiveness and the combined real role behaviors of classroom teachers and specialists?

The classroom teachers were asked to rate on a seven-point scale, from "ineffective" to "very effective," the effectiveness of the special area program for which they were responding in terms of the degree to which they believed that program met the needs and interests of children in their unit. Each of the three role scores was correlated with the responses to the effectiveness question. Table 4.11 contains the correlation coefficients obtained to determine the relationship between program effectiveness and real role behavior for the total group as well as for both staffing arrangements.

Although all nine correlation coefficients were statistically significant at the .05 level, the practical significance of the correlations between program effectiveness and real role behavior is questionable. Program effectiveness appears to be more related to the classroom teachers' perceptions of the real role behaviors of the specialists. The highest correlation coefficient is reported for schools in the specialist staffing arrangement category.

Table 4.11
CORRELATION COEFFICIENTS FOR THE RELATIONSHIP BETWEEN
PROGRAM EFFECTIVENESS AND REAL ROLE BEHAVIOR

Staffing Arrangement	N	Items		
		Classroom Teachers (1R-23R)	Specialists (24R-42R)	Total (1R-42R)
Specialist	110	.213*	.479*	.375*
Consultant	184	.173*	.407*	.338*
Total	294	.170*	.432*	.335*

* Significant at .05 level or better

It would be expected that in consultant schools, where it is assumed that classroom teachers and consultants work together, that the correlation coefficient for the combined real roles of specialist and classroom teacher would be greater than in specialist schools where specialists are responsible for all the instruction children receive in the special area subjects. This expectation was not fulfilled, although both correlations were statistically significant.

Question 7: Specific Task Relationships

Question 7 dealt with the relationship between the specific real role items and the schools' staffing arrangement. The Spearman Rank-Order Correlation was used to obtain information asked for in

Ancillary Question 7:

To what extent do the real role behaviors of classroom teachers in specialist schools relate to those same behaviors of classroom teachers in consultant schools?

The items, 1R through 23R, were rank ordered on the basis of the means from highest to lowest within each of the six staffing arrangement categories. The real role tasks performed by classroom teachers in schools employing art specialist teachers were correlated with the real role tasks performed by classroom teachers in schools employing art consultants. The same correlations were calculated for the special subject areas of music and physical education. Table 4.12 presents the correlation coefficients for specific real role behaviors compared across staffing arrangement by subject area. The results of the Spearman Rank-Order Correlations indicate the classroom teachers' real role behavior to be similar in specialist and consultant schools in art, music, and physical education.

Table 4.12
SPEARMAN RANK-ORDER CORRELATION COEFFICIENTS FOR
SPECIFIC REAL ROLE BEHAVIORS COMPARED ACROSS
STAFFING ARRANGEMENT BY SUBJECT AREA

Subject Area	r
Art	.856*
Music	.664*
Physical Education	.618*

* Significant at .05 level

An item analysis of the real role behaviors of classroom teachers which occur most frequently and least frequently was used to determine which tasks could reasonably be included in defining the role of classroom teachers in art, music, and physical education. The means for each item were tabulated for each of the six staffing arrangement categories as well as for the grand mean across staffing arrangement categories. All the means were then rank ordered and divided into three task groups: those seven tasks most frequently performed by classroom teachers, those seven tasks least frequently performed by classroom teachers, and the nine task behaviors that appeared between the high and low frequency groups. The means for each item for all the staffing arrangement categories were compared with the grand mean for each item to determine which staffing arrangement categories agreed with either the high frequency or low frequency ranking of the total group. Table 4.13.1 presents the seven items which the total group ranked as the highest frequency items. The "X" under the staffing arrangement categories indicates which categories concurred with the high frequency ranking. The frequencies for this set of items ranged from 4.44--slightly more than "once a month" to 3.39--slightly less than once a month. Table 4.13.2 presents the seven lowest frequency items and an indication which of the six staffing arrangement categories concurred with the low frequency ranking. The frequencies for this set of items ranged from 2.52 which translates to about once a semester to 1.88, less than once a year.

Table 4.13.1

RANK ORDER OF THE HIGHEST GRAND MEANS FOR THE REAL ROLE BEHAVIORS OF CLASSROOM TEACHERS
AND AN INDICATION OF AGREEMENT BY THE SIX STAFFING ARRANGEMENT CATEGORIES

Item	Grand Means	Specialist Schools			Consultant Schools		
		Art	Music	P.E.	Art	Music	P.E.
15. Include some kind of ____ activity in the daily program of the children when the specialist is not available.	4.44	x	x	x	x	x	x
16. Provide the ____ specialist with information on unit activities and needs.	4.20	x	x	x	x	x	x
14. Provide ____ activities which coordinate with the children's classroom experiences in social studies, language arts, etc.	4.17	x	x	x	x	x	
10. Select instructional materials for ____ classes I teach.	3.89	x			x	x	x
9. Develop lesson plans in ____ for the children without help from a specialist.	3.63	x			x	x	x
12. Report to parents on the progress children are making in ____.	3.46		x			x	x
4. Plan ____ activities for the children with other unit members.	3.39		x		x		

Code: 7 = always; 6 = usually; 5 = often; 4 = sometimes; 3 = occasionally; 2 = rarely; 1 = never;
0 = I don't know.

Table 4.13.2

RANK ORDER OF THE LOWEST GRAND MEANS FOR THE REAL ROLE BEHAVIORS OF CLASSROOM TEACHERS
AND AN INDICATION OF AGREEMENT BY THE SIX STAFFING ARRANGEMENT CATEGORIES

Item	Grand Means	Specialist Schools			Consultant Schools		
		Art	Music	P.E.	Art	Music	P.E.
22. Work with the ____ specialist to select instructional materials in ____ for use in the unit or classroom.	2.52	x			x		
23. Work with the ____ specialist to assess pupil progress in ____.	2.49				x	x	
7. Use a(n) ____ curriculum guide in planning ____ lessons for my students.	2.24	x	x	x	x		
5. Provide leadership in teaching ____ for other unit teachers.	2.20	x		x	x	x	
6. Develop lesson plans in ____ which other teachers in the unit can use.	1.98	x	x	x	x	x	x
19. Observe demonstration teaching sessions in which a(n) ____ specialist works with <u>children</u> and provides classroom teachers with ideas, materials and techniques for teaching ____.	1.91	x	x	x	x	x	x
18. Attend staff development (inservice) sessions in which a(n) ____ specialist works with <u>classroom teachers</u> , providing ideas and techniques for teaching ____.	1.88	x	x	x	x	x	x

Code: 7 = always; 6 = usually; 5 = often; 4 = sometimes; 3 = occasionally; 2 = rarely; 1 = never;
0 = I don't know.

The six staffing arrangement categories unanimously agreed that special area activities were included in the daily instructional program when the specialist is not available (Item 15) at the rate of a little more than "sometimes." The same was true for Item 16, "Provide the specialist with information on unit activities and needs." All but classroom teachers in the physical education consultant staffing arrangement category agreed that "providing special subject area activities which coordinate with children's classroom experiences in other areas" (Item 14) was a frequently performed task. Two items dealing with staff development (Items 18 and 19) and one item dealing with instructional leadership in the special area subjects (Item 6) recorded low means in all six staffing arrangement categories.

Descriptive Data

Items 43 to 58 on the Classroom Teacher Questionnaire asked for various types of descriptive data from the classroom teachers about their specific responsibilities in the special subject areas, descriptions of special subject area programs in terms of time and general responsibilities, frequency reports on certain organizational tasks which involved specialists and classroom teachers, and reasons why classroom teachers used special subject area activities in their units. Items 59 and 60 provided confidence and effectiveness ratings used in answering four ancillary questions.

Items 43 to 46 requested information regarding the frequency with which classroom teachers actually used and believed they ideally

should use special subject area activities in their classroom for four different reasons. In calculating the means for these items, zeros, the "I don't know" response, were omitted in order to reflect more accurately the reasons for special subject area activities in the selected schools. Table 4.14 presents the means for the real and ideal behaviors for each of the four items according to staffing arrangement category by subject area. The standard deviations are not shown because they are similar for all items. The differences were not tested for significance because the assumptions necessary for the analysis of variance were not met. However, the mean response for each group for both real and ideal behaviors for each item provides insight into the group behavior of classroom teachers in art, music, and physical education. In all instances, the mean response for ideal behavior was greater than the mean response for real behavior, indicating that classroom teachers believe that generally special subject area activities need more attention in the classroom. The means for real behavior for Items 43 to 46 ranged from 4.20 (slightly more than once a month) to 5.98 (almost once a week) for classroom teachers in the area of physical education on Item 43, "Teaching physical education to develop basic skills and understandings." The minimum mean was recorded for classroom teachers in the physical education specialist staffing arrangement category and the maximum mean was recorded for classroom teachers in the physical education consultant staffing arrangement category. The means for ideal behavior for Items 43 to 46 ranged from 5.26 for Item 46 (slightly more than "once every two or three weeks")

Table 4.14

MEAN RESPONSES FOR THE REAL AND IDEAL BEHAVIORS
OF CLASSROOM TEACHERS--ITEMS 43 TO 46

Item		Behavior	Staffing Arrangement						Total
			Specialist Schools			Consultant Schools			
			Art	Music	P.E.	Art	Music	P.E.	
43. Teach ____ to the children to develop their basic skills and understandings (basic curriculum).	Real	4.73	4.62	4.20	5.56	5.25	5.98	5.18	
	Ideal	5.40	5.41	5.31	5.99	6.11	6.20	5.83	
44. Provide ____ activities for the children to supplement the basic ____ curriculum.	Real	5.46	4.90	4.70	5.35	5.38	5.22	5.19	
	Ideal	5.73	5.74	5.66	5.71	5.74	5.94	5.75	
45. Use ____ activities during the school day for the children's own personal enjoyment.	Real	5.50	5.41	5.33	5.65	5.04	5.39	5.39	
	Ideal	5.93	6.30	6.25	6.00	5.93	6.04	6.06	
46. Use ____ activities to provide a "change-of-pace" in the classroom activities.	Real	5.63	5.05	5.40	5.44	4.68	4.78	5.14	
	Ideal	6.12	6.03	6.12	5.78	5.91	5.26	5.83	

to 6.30 for Item 45 (slightly more than "once a week"). The minimum mean was recorded by classroom teachers in the physical education consultant staffing arrangement category for Item 46, "Use physical education activities for a change of pace." The maximum mean was recorded by classroom teachers in the music specialist staffing arrangement category for Item 45, "Use music activities for the children's enjoyment."

Items 47 to 53 (Table 4.15) requested information regarding the frequency with which classroom teachers believed specialists actually do and ideally should interact with classroom teachers in the school in various ways. Interaction and communication among staff members is necessary for all teachers--classroom teachers and specialists--working together in an IGE school to meet the needs and interests of children. Tests for significant differences were not conducted for these items since the frequency response code did not provide equal intervals. However, each item of information is important in describing what is actually happening and ideally what should be happening in IGE schools in terms of interaction and communication within a total school staff, emphasizing the participation of specialists. Zeros, the "I don't know" responses, were omitted in calculating the responses for the classroom teachers' perceptions of specialists' behavior in order to reflect more accurately the activities in the areas specified in Items 47 to 53. The mean responses for real behavior for Items 47 to 53 ranged from 1.00 ("never") to 3.90 (almost "once a month"). The minimum mean was recorded by classroom teachers in the music specialist

Table 4.15

MEAN RESPONSES FOR CLASSROOM TEACHERS' PERCEPTIONS OF THE
REAL AND IDEAL ROLE BEHAVIORS OF SPECIALISTS FOR ITEMS 47 TO 53

Item	Behavior	Staffing Arrangement						Total
		Specialist Schools			Consultant Schools			
		Art	Music	P.E.	Art	Music	P.E.	
47. Meet with individual classroom teachers to exchange ideas, concerns or information.	Real	3.76	3.11	3.90	3.67	3.52	3.87	3.63
	Ideal	4.77	4.44	4.74	4.84	4.72	5.15	4.79
48. Work with classroom teachers individually or in small groups to help them gain skills, understandings, and competencies in ____.	Real	1.81	1.26	1.90	2.12	1.81	1.84	1.83
	Ideal	3.33	2.91	3.63	3.67	3.65	3.64	3.53
49. Meet with the unit to plan ____ activities.	Real	2.30	2.03	2.00	2.46	2.28	2.08	2.22
	Ideal	3.58	2.56	3.67	4.13	3.93	3.73	3.83
50. Provide demonstrating teaching sessions in which the ____ specialist works with children, etc.	Real	1.54	1.29	1.50	2.02	1.76	1.78	1.70
	Ideal	2.62	2.60	3.09	3.61	3.33	3.21	3.21
51. Provide staffing development sessions in which the ____ specialist works with classroom teachers, etc.	Real	1.26	1.03	1.38	1.48	1.18	1.26	1.30
	Ideal	2.33	2.23	2.67	2.74	2.55	2.74	2.60
52. Supervise classroom teachers' instruction in ____.	Real	1.04	1.00	1.21	1.27	1.25	1.35	1.21
	Ideal	1.73	1.70	2.08	2.31	2.32	2.35	2.15
53. Meet with other specialists in the building as a team.	Real	3.72	3.41	3.45	3.33	2.94	3.65	3.37
	Ideal	4.24	4.52	4.57	4.20	4.03	4.22	4.28

Code: 7 = more than once a week; 6 = once a week; 5 = once every two or three weeks;
4 = once a month; 3 = less often than once a month; 2 = once a year; 1 = never.

staffing arrangement category for Item 52. Those teachers reported unanimously that music specialists never supervised the classroom teacher's instruction in music. The maximum mean was recorded by classroom teachers in the physical education specialist staffing arrangement category for Item 47, "Specialists meet with individuals or small groups of classroom teachers to exchange ideas, concerns, and information."

The mean responses for ideal behaviors for Items 47 to 53 ranged from 1.70 (slightly less than "once a year") to 5.15 (slightly more than "once every two or three weeks"). The minimum mean for ideal behavior was recorded by classroom teachers in the music specialist staffing arrangement category for Item 52--the same staffing arrangement category and the same item that reported the minimum for classroom teachers' perceptions of specialists' real role behavior. The maximum mean was recorded for ideal behavior by classroom teachers in the physical education consultant category for Item 47--the same item that received the maximum mean for real behavior.

Items 54 to 58 provided descriptive information to define the parameters of the special subject area programs within each school in terms of general responsibilities of classroom teachers and specialists. Item 54 asked for the description which best fit the specialist serving that school and was used in conjunction with the principal's perception of the staffing arrangements as reported on the "Principal Questionnaire" and the specialist's response to a similar item to verify the classification of the subject area into the appropriate staffing arrangement category.

Items 55a and 55b asked for the number of times per week and the number of minutes per class the specialist met with the children in the unit. Table 4.16 presents the percentages for each subject area by staffing arrangement of the product of Items 55a x 55b, showing how many minutes children had classes with a specialist or consultant each week. As could be expected, the amount of time consultants spend with children is generally less than the amount of time specialists spend teaching children. Fifty percent of the art consultants have classes 30 minutes per week or less, while 79 percent of the art specialists spend from 30 to 60 minutes each week with children. Sixty-seven percent of the music consultants have classes with children 30 minutes per week or less, while 87 percent of the music specialists meet with each group of children 30 or more minutes per week. In physical education the situation is somewhat different from art and music. While thirty-seven percent of the physical education consultants spend 30 minutes or less per week with each class of children, another 31 percent of the physical education consultants spend 50 to 60 minutes with each class of children per week. Seventy-three percent of the physical education consultants spend 40 minutes or more per week with each class of children.

Item 56 asked for an indication of how much responsibility classroom teachers had for teaching special area subjects in their units. The responses included "none," "full responsibility," "some responsibility that complements the work of the specialist," and "some responsibility that is independent of the work of the specialist."

Table 4.16

NUMBER OF MINUTES PER WEEK CHILDREN HAVE CLASS

WITH A SPECIALIST TEACHER OR CONSULTANT

Staffing Arrangement Category	N	20 min./ week or less	20-30 min./wk.	30-40 min./wk.	40-50 min./wk.	50-60 min./wk.	60+ min./wk.	Missing	Total
Art Specialist	28	3.57	3.57	32.14	14.29	32.14	10.71	3.51	100%
Art Consultant	76	23.69	26.32	10.53	27.63	7.89	2.63	1.32	100%
Music Specialist	39	2.56	10.26	23.08	20.51	23.08	20.51	0	100%
Music Consultant	58	22.42	44.83	10.34	3.45	13.79	3.45	1.72	100%
P.E. Specialist	44	4.55	9.09	13.64	18.18	25.00	29.55	0	100%
P.E. Consultant	51	11.76	25.49	5.88	7.84	31.37	17.65	0	100%
Total	296	13.85	22.97	13.85	15.88	19.93	12.50	1.01	100%

Table 4.17 presents the percentages for each staffing arrangement by subject area for this item and shows that when classroom teachers had "some responsibility," for five of the six staffing arrangement categories, the highest percentage of classroom teachers had responsibility that was independent of the work of the specialist or consultant. For classroom teachers in the music consultant staffing arrangement category, the highest percentage of classroom teachers had some responsibility that was complementary to the work of the specialist. Sixteen teachers (5.41 percent) reported having responsibility that was both complementary to and independent of the work of the specialist.

Item 57 asked if classroom teachers other than the respondent had responsibility for teaching special area subjects to students in the unit. Table 4.18 presents the percentages for each staffing arrangement category and shows that 61 percent of the total sample reported that no other classroom teacher had any responsibility for teaching in their particular special subject area. In the physical education consultant staffing arrangement category two-thirds of the classroom teachers reported that other teachers did have responsibility for teaching physical education in the unit.

Item 58 asked if members of the instructional unit had identified a unit member to serve as a liaison or communication link between the unit and the specialist for purposes of sharing information, needs and/or concerns. Table 4.19 presents the percentages for each staffing arrangement category and shows that 61 percent of the total respondents indicated that their units had not identified a liaison person between

Table 4.17

CLASSROOM TEACHER RESPONSIBILITY IN SPECIAL SUBJECT AREAS

Staffing Arrangement Category	N	None	Full	Some Complementary	Some Independent	Complementary and Independent	Missing	Total
Art Specialist	28	28.57	0	3.57	57.14	7.14	3.57	100%
Art Consultant	76	5.26	14.47	14.47	56.58	7.89	1.32	100%
Music Specialist	39	61.54	0	7.69	30.77	0	0	100%
Music Consultant	58	13.79	10.34	37.93	31.03	5.17	1.72	100%
P. E. Specialist	44	65.91	0	9.09	25.00	0	0	100%
P. E. Consultant	51	5.88	11.76	29.41	43.14	9.80	0	100%
Total	296	25.68	7.77	18.92	41.22	5.41	1.01	100%

Table 4.18
 PERCENT OF CLASSROOM TEACHERS OTHER THAN THE RESPONDENT
 HAVING RESPONSIBILITY IN THE SPECIAL SUBJECT AREAS

Staffing Arrangement Category	N	Yes	No	Missing
Art Specialist	28	14.29	82.14	3.57
Art Consultant	76	50.00	48.68	1.32
Music Specialist	39	10.26	89.74	0
Music Consultant	58	46.55	51.72	1.72
P. E. Specialist	44	9.09	90.91	0
P. E. Consultant	51	66.67	33.33	0
Total	296	37.50	61.49	1.01

the unit and the specialist. Schools served by consultants had a higher percentage of liaison persons than did schools served by specialists. Nearly one-half of the classroom teachers in the area of music and only one-third of the classroom teachers in art and physical education reported that their units had identified liaison persons with the specialists.

Table 4.19
 PERCENT OF UNITS IDENTIFYING LIAISON PERSONS
 BETWEEN THE UNIT AND THE SPECIALIST

Staffing Arrangement Category	N	Yes	No	Missing
Art Specialist	28	28.57	67.86	3.57
Art Consultant	76	35.53	64.47	0
Music Specialist	39	48.72	51.28	0
Music Consultant	58	50.00	46.55	3.45
P. E. Specialist	44	15.91	84.09	0
P. E. Consultant	51	45.10	54.90	0
Total	296	38.18	60.81	1.01

CHAPTER V

SUMMARY AND CONCLUSIONS

Chapter V contains a summary of the study as presented in the first four chapters, the findings and conclusions of the study, and implications for practice and further research.

Summary

Individually Guided Education (IGE) is a comprehensive system of education designed by the Wisconsin Research and Development Center for Cognitive Learning to meet the needs and learning characteristics of students in elementary schools. To meet the needs of children in art, music, and physical education, the specialist, consultant, and supervisor staffing arrangements were identified. The role of the classroom teachers in each of these staffing arrangements varies from optional and minimal involvement in to full responsibility for instruction in art, music, and physical education. The role description of the classroom teacher in the IGE school, however, does not include any responsibilities in art, music, or physical education even though in the consultant and supervisor staffing arrangements, the participation of the classroom teacher may be necessary to provide quality programs in these special subject areas. The purpose of this study was to examine the role expectations and role adequacy of classroom teachers, as well as classroom teachers' perceptions of specialists' roles, to

ascertain whether differences might emerge as a function of staffing arrangement or subject area.

The review of the literature in Chapter II showed that classroom teachers are teaching art, music, and physical education and that in situations where a joint teaching effort between classroom teachers and specialists occurred, this staffing arrangement appeared to be beneficial for students' growth. Three organizational structures of IGE schools showed models of multiunit schools with specialists serving as external consultants to the IIC, as part of the IIC, and finally as functioning in a MAPE Unit, complete with unit leader. Role theory provided the theoretical basis for this study because it offered a framework for describing and understanding different aspects of persons' roles.

To obtain the data for this study, one questionnaire, modified to accommodate the three special subject areas, was developed to collect information on the real and ideal roles and role adequacy of classroom teachers, and classroom teachers' perceptions of the real and ideal role of specialists in two staffing arrangement categories. Subjects for the study were 296 classroom teachers from 47 IGE schools chosen to participate in the study because they met the criteria for inclusion in the study, including a specialist or consultant staffing arrangement category designation. Questionnaires were mailed to the selected schools and distributed to classroom teachers identified as having a particular interest or background in one of the three special subject areas. The response rate was 79 percent two months after the initial mailing.

In order to determine if role behavior is a function of staffing arrangement five null hypotheses were tested. Seven ancillary questions were investigated to determine if differences in role behavior might emerge as a function of subject area, and to determine if relationships exist between confidence and real role behavior, effectiveness and real role behavior, and specific role behaviors and staffing arrangement category and/or subject area. A two-way analysis of variance was used to test the five major hypotheses and the first two ancillary questions. Pearson product-moment correlations were used to obtain information about Ancillary Questions 3 through 6 and the Spearman Rank-Order Correlation was used to answer the seventh ancillary question. The .05 level of significance was established for all statistical tests.

Findings

This section contains a summary of the findings obtained from the analysis of the data covering the hypotheses and ancillary questions considered in this study.

Hypothesis 1: There are no differences in the real role of classroom teachers in the areas of art, music, and physical education as viewed by classroom teachers that can be attributed to staffing arrangements, utilizing specialist teachers or consultants.

The consultant staffing arrangement showed the greatest involvement of classroom teachers with a mean of 77.04, compared with a mean of 56.32 for the specialist staffing arrangement. The differences between the means for the staffing arrangements were found to be

significant at the .05 level; therefore the hypothesis was rejected.

Hypothesis 2: There are no differences in the ideal role of classroom teachers in the areas of art, music, and physical education as viewed by classroom teachers that can be attributed to staffing arrangements, utilizing specialist teachers or consultants.

This hypothesis was rejected since significant differences between the means for staffing arrangements were observed at the .05 level. The largest mean was 98.72 for the consultant staffing arrangement, versus 82.58 for the specialist staffing arrangement, indicating that classroom teachers in consultant schools view their ideal role as more involved than classroom teachers in specialist schools.

Hypothesis 3: There are no differences in role adequacy of classroom teachers in the areas of art, music, and physical education as viewed by classroom teachers that can be attributed to staffing arrangements utilizing specialist teachers or consultants.

This hypothesis was accepted since no significant differences between the staffing arrangement means were observed. Classroom teachers in both staffing arrangements viewed their role with the same degree of adequacy.

Hypothesis 4: There are no differences in the real role of specialist personnel as viewed by classroom teachers which can be attributed to staffing arrangements utilizing specialist teachers or consultants.

The differences between the means for staffing arrangements were not found to be significant at the .05 level. The hypothesis was accepted, indicating that classroom teachers in both specialist and consultant schools viewed the role of the specialists as similar.

Hypothesis 5: There are no differences in the ideal role of specialist personnel as viewed by classroom teachers

which can be attributed to staffing arrangements utilizing specialist teachers or consultants.

This hypothesis was rejected since significant differences between the means for staffing arrangements were observed at the .05 level. The largest mean was calculated for the consultant schools, indicating that ideally consultants should be more involved in the special area program than specialists.

Ancillary Question 1: Do differences exist in the real and ideal roles and role adequacy of classroom teachers which can be attributed to subject area?

The differences between the means for real and ideal role behavior and role adequacy of classroom teachers in the subject area variable were found to be significant at the .05 level. Post hoc comparisons of the means indicated that mean differences between art and music, and between art and physical education were significant, while the mean difference between music and physical education was not significant for both the real and ideal roles of classroom teachers. The differences are in favor of art, suggesting that classroom teachers are more involved in the art program than in music or physical education. For role adequacy, the post hoc comparison of the means indicated that the only significant difference in means was between art and physical education. The significant interaction in role adequacy between staffing arrangement and subject area was the result of a significantly higher mean for the physical education specialist staffing arrangement than for the other five staffing arrangements. Therefore, it might be said that subject area did make a difference in the real and ideal role behavior and role adequacy of classroom teachers.

Ancillary Question 2: Do differences exist in the classroom teachers' perceptions of the real and ideal roles of specialists which can be attributed to subject area?

The differences between the means for the real and ideal roles of specialists for the subject area variable were not significant at the .05 level. Therefore, based on these data, subject area did not make a difference in the classroom teachers' perceptions of the real and ideal roles of specialists.

Ancillary Question 3: Is there a relationship between classroom teachers' confidence in teaching art, or music, or physical education and their real role behavior in art, or music, or physical education?

The results indicated that there were significant relationships between classroom teachers' confidence in teaching the special subject areas and their real role behavior. The following Pearson product-moment correlations, although statistically significant at the .05 level, indicate minimal practical relationships between confidence and involvement: $r = .448$ for art; $r = .420$ for physical education; and $r = .275$ for music.

Ancillary Question 4: Is there a relationship between classroom teachers' perceptions of program effectiveness and the classroom teachers' real role behavior?

The following Pearson product-moment correlation coefficients are significant at the .05 level: $r = .213$ for specialist schools; $r = .173$ for consultant schools; and $r = .170$ for both staffing arrangements. The correlation coefficients were positive but weak. Program effectiveness did not appear to be strongly related to classroom teachers' real role behavior.

Ancillary Question 5: Is there a relationship between classroom teachers' perceptions of program effectiveness and the classroom teachers' perceptions of specialists' real role behavior?

The following Pearson product-moment correlation coefficients are significant at the .05 level: $r = .479$ for specialist schools; $r = .407$ for consultant schools; and $r = .432$ for both staffing arrangements together. In Garrett's (1966) terms, these correlation coefficients denote substantial relationship. Consequently program effectiveness appeared to be more related to the real role behavior of specialists than that of classroom teachers.

Ancillary Question 6: Is there a relationship between classroom teachers' perceptions of program effectiveness and the combined real role behaviors of classroom teachers and specialists?

The relationship between program effectiveness and the combined real role behaviors of classroom teachers and specialists was significant at the .05 level. The following Pearson product-moment correlation coefficients indicate the small range of that relationship for the different staffing arrangements: $r = .375$ for specialist schools; $r = .338$ for consultant schools; and $r = .335$ for both staffing arrangements. Program effectiveness did not appear to be strongly related to the combined real role behaviors of classroom teachers and specialists.

Ancillary Question 7: To what extent do the real role behaviors of classroom teachers in specialist schools relate to those same behaviors of classroom teachers in consultant schools?

The results indicated that classroom teachers' real role behavior was similar in specialist and consultant schools in art, music, and physical education. The following Spearman Rank-Order correlation

coefficients were significant at the .05 level; $r = .856$ for art; $r = .664$ for music; and $r = .618$ for physical education. In Garrett's (1966) terms the relationship for art was high, and for music and physical education substantial. This suggests that classroom teachers were performing the same tasks in both specialist and consultant schools and that the real role behavior of classroom teachers was most similar in the art program.

Conclusions

Based on the findings of the study, the following conclusions were drawn:

1. Classroom teachers working in schools employing consultants in art, music, and physical education are more involved in special area programs than classroom teachers in specialist schools.
2. Classroom teachers working in both specialist schools and consultant schools believe they should be more involved in the special area programs, with classroom teachers in consultant schools viewing their potential involvement as greater than that of classroom teachers in specialist schools.
3. Classroom teachers in both specialist schools and consultant schools view their role in the special subject areas with the same degree of adequacy. In other words, the degree of difference between what classroom teachers believe they

should be doing and what they are actually doing in art, music, and physical education is the same for both staffing arrangements.

4. Classroom teachers perform the same tasks in both specialist schools and consultant schools, but classroom teachers in consultant schools perform these tasks more frequently. The average frequency with which classroom teachers in consultant schools performed all 23 real role tasks was 3.35, which is between "once a month" and "less often than once a month." The average frequency for classroom teachers in specialist schools was 2.45, which falls between "less often than once a month" and "once a year."
5. Classroom teachers do not perceive differences between the real role behavior of specialists and that of consultants. They do perceive a limited degree of difference in the ideal role of specialist personnel in that consultants ideally should be more involved with classroom teachers in the special area programs than should specialists.
6. The effectiveness of a special area program depends most upon the input of the specialist, especially in specialist teacher schools. The input of the classroom teachers, even in consultant schools where their involvement is greater, has a negligible effect on classroom teachers' perceptions of program effectiveness.

7. Classroom teachers are most confident teaching art, and consequently are most involved in the art program. Although classroom teachers are more confident about teaching physical education than music, they are more involved in the music program. In general, classroom teachers believe their involvement in art and music to be adequate, but agree that they could be more involved in physical education.
8. Sharing information with specialists and integrating the special subject areas into the curriculum are the most frequently performed classroom teacher tasks, while staff development and instructional leadership tasks in art, music, and physical education are the least frequently performed classroom teacher tasks.
9. In consultant schools, consultants provide services which could increase classroom teacher involvement in the special subject areas less often than once a year. The incidence of such support services is even less in specialist schools.

Implications for Practice and Research

This section is divided into recommendations for the role of the classroom teacher and the role of the specialist from the classroom teacher's perspective, implications for the multiunit organization, and suggestions for further research.

The Role of the Classroom Teacher

The role behavior of the classroom teacher can be divided into three groups of tasks: (1) tasks which provide a basic program in the special subject areas within the classroom setting; (2) tasks which extend that basic program in the special subject areas; and (3) tasks which improve the classroom teacher's ability to provide a special subject area program within the classroom.

The data indicated that classroom teachers in specialist and consultant schools perform similar tasks, but that classroom teachers in consultant schools actually perform and believed that ideally they should perform these tasks more frequently than classroom teachers in specialist schools. Classroom teachers in both types of schools agreed on the importance of a group of three basic program tasks. The grand means for the three tasks were ranked one, two, and three, respectively in both the real and ideal behavior responses. The tasks involve two activities which the classroom teachers can initiate and accomplish alone and a third task which involves cooperation with the specialist. To provide a basic program in the special subject areas in the classroom in addition to the work of the specialists, the following tasks are recommended for classroom teachers in both types of schools:

1. Include some kind of special area activity in the daily program of the children when a specialist is not available.
2. Provide special area activities which coordinate with and/or enrich the children's classroom experiences in social studies, language arts, etc.

3. Provide the specialist with information on unit activities and needs.

A second group of tasks is recommended for classroom teachers in either specialist or consultant schools who believe they are already providing a basic program in the special subject areas within their classrooms. The data indicated that these tasks were generally performed "occasionally" or "rarely" by the classroom teachers in the study, but ideally should be performed between "sometimes" and "often." Two tasks involve independent activities for students which classroom teachers can provide in the classroom and the third task involves sharing information with the specialist. To extend the basic special subject area program within the classroom, it is recommended that classroom teachers give more attention to the following:

4. Provide opportunities for children to pursue special subject area interests during their independent study periods.
5. Select and organize individualized special subject area activities for students to use independently.
6. Share general lesson plans with the specialists so that they are informed of plans, needs and interests.

Instructional leadership and staff development are two role expectations of classroom teachers in the academic areas in IGE schools (Lipham, Klausmeier, and Walter, 1977). The data indicated that classroom teachers rarely or never performed tasks of that type in art, music, or physical education. In order for the special subject areas to have a place in the daily instructional program of the children,

especially in consultant schools, instructional leadership and staff development activities should be extended to include the special subject areas. These tasks should be performed more frequently in consultant schools than in specialist schools. The implementation of the two leadership tasks (Items 7 and 8) and the two staff development tasks (Items 9 and 10) may provide the help needed to improve classroom teachers' abilities to offer special subject area programs in the classroom in addition to the work of the specialists. It is recommended that:

7. Classroom teachers in each unit should identify resource persons within the unit to provide leadership in teaching art, or music, or physical education for other unit teachers.
8. The classroom teachers designated as resource persons should develop lesson plans in art, music, or physical education which other teachers in the unit can use.
9. Classroom teachers should observe demonstration teaching sessions in which specialists work with children and provide classroom teachers with ideas, materials, and techniques for teaching in the special subject areas.
10. Classroom teachers should be given opportunities to attend staff development sessions in which specialists work with classroom teachers, providing ideas and techniques for teaching in the special subject areas.

The Role of the Specialist

The data indicated that classroom teachers perceived no differences between the real role behaviors of specialists and consultants. However, classroom teachers believed that consultants should be more involved in the special area programs than should specialists. Classroom teachers in consultant schools were themselves more involved in the special subject areas than their colleagues in the specialist schools and, because of this more frequent contact with consultants, had a different perspective on the role of the specialist. Based on the grand means of the items, classroom teachers in both types of schools indicated that four tasks were important for the specialist personnel in their schools. The first two tasks deal with the teaching process and the second two tasks deal with cooperation with classroom teachers. It is recommended that specialists should perform the following tasks.

1. Teach the special subjects to the children to develop skills and understandings in art, music, or physical education.
2. Assess pupil progress in the special area subjects.
3. Help classroom teachers identify and locate resources in art, music, or physical education.
4. Respond to requests from classroom teachers who wish to provide their children with special subject area activities, either for recreational purposes or to enrich their regular classroom experiences.

The data showed substantial differences between the real behavior and ideal behavior of specialists for two tasks. Therefore, to better meet the needs of students in art, music, or physical education, classroom teachers believed that specialists should:

5. Specify instructional objectives for special subject area classes.
6. Provide for individual differences of students in teaching special subject area classes.

The Multiunit Organization

Communication and cooperation are two aspects of the multiunit organization which are necessary for meeting the needs of students in IGE schools. The data suggested the need for improved communication between specialists and classroom teachers, since only 38 percent of the classroom teachers reported that their units had identified liaison persons between the unit and the specialist. The classroom teachers reported that specialists met with their unit slightly more than once a year to plan special area activities, but believed that ideally unit meetings with the specialist should occur about once a month. Specialists met with individual classroom teachers to exchange ideas, concerns, or information about once a month, but classroom teachers believed this should occur about once every two or three weeks. Classroom teachers also believed that specialists should meet with other specialists as a team more than once a month.

To improve communication and cooperation between specialists and classroom teachers, the following recommendations are made:

1. The units should identify a liaison person between the unit and each specialist.
2. Specialists and classroom teachers should meet at least once a month to plan special subject area activities for the unit and to exchange ideas, concerns, and information.
3. Specialists should meet with other specialists as a team at least every two weeks.

Classroom teachers reported two items that especially inhibited their involvement in the special subject area programs in multiunit schools: (1) specialists often taught special subject area classes during classroom teachers' planning time, and (2) the special subject area classes were often planned to be independent of what students were doing in the academic areas. In order to increase the involvement of classroom teachers in art, music, and physical education, some provision should be made to allow time for classroom teachers to plan with specialists. If specialists could work with classroom teachers in planning the special subject area curriculum, special subject area activities could more often be coordinated with the children's classroom experiences and be a part of the children's daily instructional program.

Further Research

Several questions for further research have been raised by this study. Researchers and practitioners alike may find the following questions of interest:

1. To what extent is student achievement in art, music, or physical education related to the involvement of classroom teachers in those instructional programs?
2. What differences between the ideal and real roles of classroom teachers in art, music, and physical education programs would emerge as roles are viewed by other referent groups such as principals, district coordinators, or parents?
3. What effect would staff development sessions in the special subject areas have on the classroom teachers' competencies, as well as their perceptions of their roles in art, music, and physical education?
4. What effect would establishing a MAPE Unit with liaison persons identified to communicate with the specialists have on the classroom teachers' perceptions of their own role, the role of the specialists in art, music, and physical education, and student attitude and achievement?
5. To what extent do classroom teachers and specialists agree on the importance of specific instructional goals and objectives in art, or music, or physical education?

In conclusion, it is the author's hope that this study will help classroom teachers to better understand and fulfill their roles in the special subject areas, so that the needs and interests of students can be met and their potential fulfilled in art, music, and physical education.

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APPENDIX A

CLASSROOM TEACHER QUESTIONNAIRES FOR
ART, MUSIC, AND PHYSICAL EDUCATION

ID No. _____

CLASSROOM TEACHER QUESTIONNAIRE

Part A: Classroom Teacher Behavior Description in Art

Each item in this section describes a specific task which you may or may not do, depending on the staffing arrangements for art in your school. Please indicate the frequency with which you believe you actually do and ideally should do each task.

1. READ each item carefully.
2. THINK how frequently you actually do that task in your school and enter your answer in the left hand column.
3. THINK how frequently you believe you should do that task and enter your answer in the right hand column.
4. Please RESPOND to every item and use the frequency code shown below.

MY ACTUAL BEHAVIOR

- 7 I always do this task.
 6 I usually do this task.
 5 I often do this task.
 4 I sometimes do this task.
 3 I occasionally do this task.
 2 I rarely do this task.
 1 I never do this task.
 0 Does not apply.

MY IDEAL BEHAVIOR

- 7 I should always do this task.
 6 I should usually do this task.
 5 I should often do this task.
 4 I should sometimes do this task.
 3 I should occasionally do this task.
 2 I should rarely do this task.
 1 I should never do this task.
 0 Would not apply.

MY ACTUAL
BEHAVIOR

- | | |
|---|----------|
| 1. Plan for individual differences of children in preparing art lessons. | 1. _____ |
| 2. Select and organize individualized art activities for students to use independently. | 2. _____ |
| 3. Provide opportunities for children to pursue art interests during their independent study periods. | 3. _____ |
| 4. Plan art activities for the children with other unit members. | 4. _____ |
| 5. Provide leadership in teaching art for other unit teachers. | 5. _____ |
| 6. Develop lesson plans in art which other teachers in the unit can use. | 6. _____ |

MY IDEAL
BEHAVIOR

- 2 -

ACTUAL BEHAVIOR

- 7 I always
 6 I usually
 5 I often
 4 I sometimes
 3 I occasionally
 2 I rarely
 1 I never
 0 Does not apply.

IDEAL BEHAVIOR

- 7 I should always
 6 I should usually
 5 I should often
 4 I should sometimes
 3 I should occasionally
 2 I should rarely
 1 I should never
 0 Would not apply.

MY ACTUAL
BEHAVIOR

- | | |
|--|---------|
| ___ 7. Use an art curriculum guide in planning art lessons for my students. | 7. ___ |
| ___ 8. Specify instructional objectives in art for the children I teach. | 8. ___ |
| ___ 9. Develop lesson plans in art for the children without help from a specialist. | 9. ___ |
| ___ 10. Select instructional materials for art classes I teach. | 10. ___ |
| ___ 11. Assess pupil progress in art. | 11. ___ |
| ___ 12. Report to parents on the progress children are making in art. | 12. ___ |
| ___ 13. Remain in the room with the children when the art specialist is teaching. | 13. ___ |
| ___ 14. Provide art activities which coordinate with the children's classroom experiences in social studies, language arts, etc. | 14. ___ |
| ___ 15. Include some kind of art activity in the daily program of the children when the specialist is not available. | 15. ___ |
| ___ 16. Provide the art specialist with information on unit activities and needs. | 16. ___ |
| ___ 17. Share lesson plans for areas other than art with the art specialist so that the specialist is informed of plans, needs, and interests. | 17. ___ |
| ___ 18. Attend staff development (inservice) sessions in which an art specialist works with <u>classroom teachers</u> , providing ideas and techniques for teaching art. | 18. ___ |
| ___ 19. Observe demonstration teaching sessions in which an art specialist works with <u>children</u> and provides classroom teachers with ideas, materials and techniques for teaching art. | 19. ___ |

MY IDEAL
BEHAVIOR

- 3 -

ACTUAL BEHAVIOR

- 7 I always
 6 I usually
 5 I often
 4 I sometimes
 3 I occasionally
 2 I rarely
 1 I never
 0 Does not apply.

IDEAL BEHAVIOR

- 7 I should always
 6 I should usually
 5 I should often
 4 I should sometimes
 3 I should occasionally
 2 I should rarely
 1 I should never
 0 Would not apply.

MY ACTUAL
BEHAVIOR

- ___ 20. Work with the specialist to plan activities I can use.
 ___ 21. Work with the specialist in establishing the schedule
 of art classes for the unit.
 ___ 22. Work with the art specialist to select instructional
 materials in art for use in the unit or classroom.
 ___ 23. Work with the art specialist to assess pupil progress
 in art.

MY IDEAL
BEHAVIOR

20. ___
 21. ___
 22. ___
 23. ___

COMMENTS:

- 4 -

Part B: Art Specialist Behavior Description

Each item in this section describes a specific task which the art specialist may or may not do, depending on the staffing arrangements for art in your school. Please indicate the frequency with which you believe the art specialist actually does and ideally should do each task.

1. READ each item carefully.
2. THINK how frequently you believe the art specialist actually does that task in your school and enter your answer in the left hand column.
3. THINK how frequently you believe the art specialist should do that task and enter your answer in the right hand column.
4. Please RESPOND to every item and use the frequency code shown below.

SPECIALIST'S ACTUAL BEHAVIOR

SPECIALIST'S IDEAL BEHAVIOR

- | | |
|--|---|
| 7 The art specialist <u>always</u> does this task. | 7 The art specialist should <u>always</u> do this task. |
| 6 <u>usually</u> does this task. | 6 should <u>usually</u> do this task. |
| 5 <u>often</u> does this task. | 5 should <u>often</u> do this task. |
| 4 <u>sometimes</u> does this task. | 4 should <u>sometimes</u> do this task. |
| 3 <u>occasionally</u> does this task. | 3 should <u>occasionally</u> do this task. |
| 2 <u>rarely</u> does this task. | 2 should <u>rarely</u> do this task. |
| 1 <u>never</u> does this task. | 1 should <u>never</u> do this task. |
| 0 I don't know. | |

ACTUAL
BEHAVIORIDEAL
BEHAVIOR

- | | |
|---|----------|
| ____ 24. Provide classroom teachers with assistance so they can continue a sequence of instruction in a given art activity which has been initiated in art class. | 24. ____ |
| ____ 25. Help classroom teachers specify instructional objectives in art for children. | 25. ____ |
| ____ 26. Help classroom teachers identify and locate resources in art. | 26. ____ |
| ____ 27. Respond to requests from classroom teachers who wish to provide their children with art activities, either for recreational purposes or to enrich their regular classroom experiences. | 27. ____ |
| ____ 28. Participate in parent-classroom teacher conferences about children. | 28. ____ |
| ____ 29. Prepare lesson plans in art for classroom teachers to follow. | 29. ____ |
| ____ 30. Provide classroom teachers with a variety of instructional materials in art they can use in the unit or classroom. | 30. ____ |

- 5 -

SPECIALIST'S ACTUAL BEHAVIOR

- 7 The art specialist always does this task.
- 6 usually does this task.
- 5 often does this task.
- 4 sometimes does this task.
- 3 occasionally does this task.
- 2 rarely does this task.
- 1 never does this task.
- 0 I don't know

SPECIALIST'S IDEAL BEHAVIOR

- 7 The art specialist should always do this task.
- 6 should usually do this task.
- 5 should often do this task.
- 4 should sometimes do this task.
- 3 should occasionally do this task.
- 2 should rarely do this task.
- 1 should never do this task.

ACTUAL
BEHAVIORIDEAL
BEHAVIOR

- | | |
|--|---------|
| ___ 31. Ask classroom teachers to remain in the room with their children during art classes. | 31. ___ |
| ___ 32. Provide art activities which coordinate with the children's classroom experiences in social studies, language arts, etc. | 32. ___ |
| ___ 33. Share lesson plans with classroom teachers so that classroom teachers know what is happening in art classes. | 33. ___ |
| ___ 34. Specify instructional objectives for art classes. | 34. ___ |
| ___ 35. Provide for individual differences of students in teaching art classes. | 35. ___ |
| ___ 36. Assess pupil progress in art. | 36. ___ |
| ___ 37. Report to parents on the progress children are making in art. | 37. ___ |
| ___ 38. Plan art classes that are independent of what students are doing in social studies, language arts, etc. | 38. ___ |
| ___ 39. Teach art to the children to develop skills and understandings in art. | 39. ___ |
| ___ 40. Assign children to art classes according to their needs and/or abilities in art. | 40. ___ |
| ___ 41. Teach art classes during the classroom teachers' planning time. | 41. ___ |
| ___ 42. Observe children's non-art activities in the unit or classroom. | 42. ___ |

COMMENTS:

- 6 -

For the next items, please use the following frequency code to indicate the frequency with which you and the art specialist actually do and ideally should do each task.

- | | |
|---------------------------------|--------------------------------|
| 7 More than once a week | 3 Less often than once a month |
| 6 Once a week | 2 Once a year |
| 5 Once every two or three weeks | 1 Never |
| 4 Once a month | 0 I don't know |

HOW OFTEN
DO YOU:

HOW OFTEN
SHOULD YOU:

- | | |
|--|---------|
| ___ 43. Teach art to the children to develop their basic skills and understandings (basic art curriculum). | 43. ___ |
| ___ 44. Provide art activities for the children to supplement the basic art curriculum. | 44. ___ |
| ___ 45. Use art activities during the school day for the children's own personal enjoyment. | 45. ___ |
| ___ 46. Use art activities to provide a "change-of-pace" in the classroom activities. | 46. ___ |

HOW OFTEN DOES
THE SPECIALIST:

HOW OFTEN SHOULD
THE SPECIALIST:

- | | |
|--|---------|
| ___ 47. Meet with individual classroom teachers to exchange ideas, concerns or information. | 47. ___ |
| ___ 48. Work with classroom teachers individually or in small groups to help them gain skills, understandings, and competencies in art. | 48. ___ |
| ___ 49. Meet with your unit to plan art activities. | 49. ___ |
| ___ 50. Provide demonstration teaching sessions in which the art specialist works with <u>children</u> and provides classroom teachers with ideas, materials, and techniques for teaching art. | 50. ___ |
| ___ 51. Provide staff development (inservice) sessions in which the art specialist works with <u>classroom teachers</u> to provide ideas and techniques for teaching art. | 51. ___ |
| ___ 52. Supervise classroom teachers' instruction in art. | 52. ___ |
| ___ 53. Meet with other specialists in the building as a team. | 53. ___ |

- 7 -

Part C: School and Teacher Information

54. Which description best fits the art specialist who serves your school?

- ☐ 1. Provides all of the instruction children receive in art; classroom teachers are not expected to teach art.
- ☐ 2. Provides most of the instruction children receive in art; also works with classroom teachers who may be expected to do some art teaching.
- ☐ 3. Does no regular teaching; provides assistance to classroom teachers who may be expected to teach art.

55. How often do children in your unit have art classes with the art specialist?
(Give the number of times per week and the number of minutes per class.)

Number of times per week Number of minutes per class

56. How much responsibility do you have for teaching art to the children in your unit? (Check one)

- ☐ 1 None ☐ 2 Full responsibility
- ☐ 3 Some responsibility that complements the work of the specialist
- ☐ 4 Some responsibility that is independent of the work of the specialist

57. Do any other classroom teachers in your instructional unit have responsibility for teaching art to the students in your unit?

- ☐ 1 Yes ☐ 2 No

58. Has your unit identified a person to serve as a liaison or communication link between your unit and the art specialist for sharing information, needs, and/or concerns?

- ☐ 1 Yes ☐ 2 No

59. Considering your own background and experience in these special areas:

- a. How confident do you feel about teaching art to your students?
Not confident 1 2 3 4 5 6 7 Very confident
- b. How confident do you feel about teaching music to your students?
Not confident 1 2 3 4 5 6 7 Very confident
- c. How confident do you feel about teaching P. E. to your students?
Not confident 1 2 3 4 5 6 7 Very confident

60. In terms of meeting the art needs and interests of the children in your unit, how would you rate the effectiveness of the art program in your school?

Ineffective 1 2 3 4 5 6 7 Very effective

ID No. _____

CLASSROOM TEACHER QUESTIONNAIRE

Part A: Classroom Teacher Behavior Description in Music

Each item in this section describes a specific task which you may or may not do, depending on the staffing arrangements for music in your school. Please indicate the frequency with which you believe you actually do and ideally should do each task.

1. READ each item carefully.
2. THINK how frequently you actually do that task in your school and enter your answer in the left hand column.
3. THINK how frequently you believe you should do that task and enter your answer in the right hand column.
4. Please RESPOND to every item and use the frequency code shown below.

MY ACTUAL BEHAVIOR

- 7 I always do this task.
 6 I usually do this task.
 5 I often do this task.
 4 I sometimes do this task.
 3 I occasionally do this task.
 2 I rarely do this task.
 1 I never do this task.
 0 Does not apply.

MY IDEAL BEHAVIOR

- 7 I should always do this task.
 6 I should usually do this task.
 5 I should often do this task.
 4 I should sometimes do this task.
 3 I should occasionally do this task.
 2 I should rarely do this task.
 1 I should never do this task.
 0 Would not apply.

MY ACTUAL
BEHAVIOR

- ____ 1. Plan for individual differences of children in preparing music lessons.
 ____ 2. Select and organize individualized music activities for students to use independently.
 ____ 3. Provide opportunities for children to pursue music interests during their independent study periods.
 ____ 4. Plan music activities for the children with other unit members.
 ____ 5. Provide leadership in teaching music for other unit teachers.
 ____ 6. Develop lesson plans in music which other teachers in the unit can use.

MY IDEAL
BEHAVIOR

1. ____
 2. ____
 3. ____
 4. ____
 5. ____
 6. ____

- 2 -

ACTUAL BEHAVIOR

- 7 I always
 6 I usually
 5 I often
 4 I sometimes
 3 I occasionally
 2 I rarely
 1 I never
 0 Does not apply.

IDEAL BEHAVIOR

- 7 I should always
 6 I should usually
 5 I should often
 4 I should sometimes
 3 I should occasionally
 2 I should rarely
 1 I should never
 0 Would not apply.

MY ACTUAL
BEHAVIOR

7. Use a music curriculum guide in planning music lessons for my students. 7. ____
 8. Specify instructional objectives in music for the children I teach. 8. ____
 9. Develop lesson plans in music for the children without help from a specialist. 9. ____
 10. Select instructional materials for music classes I teach. 10. ____
 11. Assess pupil progress in music. 11. ____
 12. Report to parents on the progress children are making in music. 12. ____
 13. Remain in the room with the children when the music specialist is teaching. 13. ____
 14. Provide music activities which coordinate with the children's classroom experiences in social studies, language arts, etc. 14. ____
 15. Include some kind of music activity in the daily program of the children when the specialist is not available. 15. ____
 16. Provide the music specialist with information on unit activities and needs. 16. ____
 17. Share lesson plans for areas other than music with the music specialist so that the specialist is informed of plans, needs, and interests. 17. ____
 18. Attend staff development (inservice) sessions in which a music specialist works with classroom teachers, providing ideas and techniques for teaching music. 18. ____
 19. Observe demonstration teaching sessions in which a music specialist works with children and provides classroom teachers with ideas, materials and techniques for teaching music. 19. ____

MY IDEAL
BEHAVIOR

- 3 -

ACTUAL BEHAVIOR		IDEAL BEHAVIOR	
7	I <u>always</u>	7	I should <u>always</u>
6	I <u>usually</u>	6	I should <u>usually</u>
5	I <u>often</u>	5	I should <u>often</u>
4	I <u>sometimes</u>	4	I should <u>sometimes</u>
3	I <u>occasionally</u>	3	I should <u>occasionally</u>
2	I <u>rarely</u>	2	I should <u>rarely</u>
1	I <u>never</u>	1	I should <u>never</u>
0	Does not apply.	0	Would not apply.

MY ACTUAL BEHAVIOR		MY IDEAL BEHAVIOR
___ 20.	Work with the specialist to plan activities I can use.	20. ___
___ 21.	Work with the specialist in establishing the schedule of music classes for the unit.	21. ___
___ 22.	Work with the music specialist to select instructional materials in music for use in the unit or classroom.	22. ___
___ 23.	Work with the music specialist to assess pupil progress in music.	23. ___

COMMENTS:

- 4 -

Part B: Music Specialist Behavior Description

Each item in this section describes a specific task which the music specialist may or may not do, depending on the staffing arrangements for music in your school. Please indicate the frequency with which you believe the music specialist actually does and ideally should do each task.

1. READ each item carefully.
2. THINK how frequently you believe the music specialist actually does that task in your school and enter your answer in the left hand column.
3. THINK how frequently you believe the music specialist should do that task and enter your answer in the right hand column.
4. Please RESPOND to every item and use the frequency code shown below.

SPECIALIST'S ACTUAL BEHAVIOR

SPECIALIST'S IDEAL BEHAVIOR

- | | |
|--|---|
| 7 The music specialist <u>always</u> does this task. | 7 The music specialist should <u>always</u> do this task. |
| 6 <u>usually</u> does this task. | 6 should <u>usually</u> do this task. |
| 5 <u>often</u> does this task. | 5 should <u>often</u> do this task. |
| 4 <u>sometimes</u> does this task. | 4 should <u>sometimes</u> do this task. |
| 3 <u>occasionally</u> does this task. | 3 should <u>occasionally</u> do this task. |
| 2 <u>rarely</u> does this task. | 2 should <u>rarely</u> do this task. |
| 1 <u>never</u> does this task. | 1 should <u>never</u> do this task. |
| 0 I don't know. | |

ACTUAL
BEHAVIORIDEAL
BEHAVIOR

- | | |
|--|---------|
| ___ 24. Provide classroom teachers with assistance so they can continue a sequence of instruction in a given music activity which has been initiated in music class. | 24. ___ |
| ___ 25. Help classroom teachers specify instructional objectives in music for children. | 25. ___ |
| ___ 26. Help classroom teachers identify and locate resources in music. | 26. ___ |
| ___ 27. Respond to requests from classroom teachers who wish to provide their children with music activities, either for recreational purposes or to enrich their regular classroom experiences. | 27. ___ |
| ___ 28. Participate in parent-classroom teacher conferences about children. | 28. ___ |
| ___ 29. Prepare lesson plans in music for classroom teachers to follow. | 29. ___ |
| ___ 30. Provide classroom teachers with a variety of instructional materials in music they can use in the unit or classroom. | 30. ___ |

- 5 -

SPECIALIST'S ACTUAL BEHAVIOR

- 7 The music specialist always does this task.
- 6 usually does this task.
- 5 often does this task.
- 4 sometimes does this task.
- 3 occasionally does this task.
- 2 rarely does this task.
- 1 never does this task.
- 0 I don't know.

SPECIALIST'S IDEAL BEHAVIOR

- 7 The music specialist should always do this task.
- 6 should usually do this task.
- 5 should often do this task.
- 4 should sometimes do this task.
- 3 should occasionally do this task.
- 2 should rarely do this task.
- 1 should never do this task.

ACTUAL
BEHAVIORIDEAL
BEHAVIOR

- | | |
|--|---------|
| ___ 31. Ask classroom teachers to remain in the room with their children during music classes. | 31. ___ |
| ___ 32. Provide music activities which coordinate with the children's classroom experiences in social studies, language arts, etc. | 32. ___ |
| ___ 33. Share lesson plans with classroom teachers so that classroom teachers know what is happening in music classes. | 33. ___ |
| ___ 34. Specify instructional objectives for music classes. | 34. ___ |
| ___ 35. Provide for individual differences of students in teaching music classes. | 35. ___ |
| ___ 36. Assess pupil progress in music. | 36. ___ |
| ___ 37. Report to parents on the progress children are making in music. | 37. ___ |
| ___ 38. Plan music classes that are independent of what students are doing in social studies, language arts, etc. | 38. ___ |
| ___ 39. Teach music to the children to develop skills and understandings in music. | 39. ___ |
| ___ 40. Assign children to music classes according to their needs and/or abilities in music. | 40. ___ |
| ___ 41. Teach music classes during the classroom teachers' planning time. | 41. ___ |
| ___ 42. Observe children's non-music activities in the unit or classroom. | 42. ___ |

COMMENTS:

- 6 -

For the next items, please use the following frequency code to indicate the frequency with which you and the music specialist actually do and ideally should do each task.

- | | |
|---------------------------------|--------------------------------|
| 7 More than once a week | 3 Less often than once a month |
| 6 Once a week | 2 Once a year |
| 5 Once every two or three weeks | 1 Never |
| 4 Once a month | 0 I don't know |

HOW OFTEN
DO YOU:

HOW OFTEN
SHOULD YOU:

- | | |
|--|---------|
| ___ 43. Teach music to the children to develop their basic skills and understandings (basic music curriculum). | 43. ___ |
| ___ 44. Provide music activities for the children to supplement the basic music curriculum. | 44. ___ |
| ___ 45. Use music activities during the school day for the children's own personal enjoyment. | 45. ___ |
| ___ 46. Use music activities to provide a "change-of-pace" in the classroom activities. | 46. ___ |

HOW OFTEN DOES
THE SPECIALIST:

HOW OFTEN SHOULD
THE SPECIALIST:

- | | |
|--|---------|
| ___ 47. Meet with individual classroom teachers to exchange ideas, concerns or information. | 47. ___ |
| ___ 48. Work with classroom teachers individually or in small groups to help them gain skills, understandings, and competencies in music. | 48. ___ |
| ___ 49. Meet with your unit to plan music activities. | 49. ___ |
| ___ 50. Provide demonstration teaching sessions in which the music specialist works with <u>children</u> and provides classroom teachers with ideas, materials, and techniques for teaching music. | 50. ___ |
| ___ 51. Provide staff development (inservice) sessions in which the music specialist works with <u>classroom teachers</u> to provide ideas and techniques for teaching music. | 51. ___ |
| ___ 52. Supervise classroom teachers' instruction in music. | 52. ___ |
| ___ 53. Meet with other specialists in the building as a team. | 53. ___ |

- 7 -

Part C: School and Teacher Information

54. Which description best fits the music specialist who serves your school?

- ☐ 1. Provides all of the instruction children receive in music; classroom teachers are not expected to teach music.
- ☐ 2. Provides most of the instruction children receive in music; also works with classroom teachers who may be expected to do some music teaching.
- ☐ 3. Does no regular teaching; provides assistance to classroom teachers who may be expected to teach music.

55. How often do children in your unit have music classes with the music specialist? (Give the number of times per week and the number of minutes per class.)

Number of times per week

Number of minutes per class

56. How much responsibility do you have for teaching music to the children in your unit? (Check one)

- ☐ 1 None ☐ 2 Full responsibility
- ☐ 3 Some responsibility that complements the work of the specialist
- ☐ 4 Some responsibility that is independent of the work of the specialist

57. Do any other classroom teachers in your instructional unit have responsibility for teaching music to the students in your unit?

- ☐ 1 Yes ☐ 2 No

58. Has your unit identified a person to serve as a liaison or communication link between your unit and the music specialist for sharing information, needs, and/or concerns?

- ☐ 1 Yes ☐ 2 No

59. Considering your own background and experience in these special areas:

a. How confident do you feel about teaching music to your students?

Not confident 1 2 3 4 5 6 7 Very confident

b. How confident do you feel about teaching art to your students?

Not confident 1 2 3 4 5 6 7 Very confident

c. How confident do you feel about teaching P. E. to your students?

Not confident 1 2 3 4 5 6 7 Very confident

60. In terms of meeting the music needs and interests of the children in your unit, how would you rate the effectiveness of the music program in your school?

Ineffective 1 2 3 4 5 6 7 Very effective

ID No. _____

CLASSROOM TEACHER QUESTIONNAIRE

Part A: Classroom Teacher Behavior Description in Physical Education

Each item in this section describes a specific task which you may or may not do, depending on the staffing arrangements for physical education in your school. Please indicate the frequency with which you believe you actually do and ideally should do each task.

1. READ each item carefully.
2. THINK how frequently you actually do that task in your school and enter your answer in the left hand column.
3. THINK how frequently you believe you should do that task and enter your answer in the right hand column.
4. Please RESPOND to every item and use the frequency code shown below.

MY ACTUAL BEHAVIOR

- 7 I always do this task.
 6 I usually do this task.
 5 I often do this task.
 4 I sometimes do this task.
 3 I occasionally do this task.
 2 I rarely do this task.
 1 I never do this task.
 0 Does not apply.

MY IDEAL BEHAVIOR

- 7 I should always do this task.
 6 I should usually do this task.
 5 I should often do this task.
 4 I should sometimes do this task.
 3 I should occasionally do this task.
 2 I should rarely do this task.
 1 I should never do this task.
 0 Would not apply.

MY ACTUAL
BEHAVIOR

- ___ 1. Plan for individual differences of children in preparing physical education lessons.
 ___ 2. Select and organize individualized P. E. activities for students to use independently.
 ___ 3. Provide opportunities for children to pursue P. E. interests during their independent study periods.
 ___ 4. Plan physical education activities for the children with other unit members.
 ___ 5. Provide leadership in teaching physical education for other unit teachers.
 ___ 6. Develop lesson plans in physical education which other teachers in the unit can use.

MY IDEAL
BEHAVIOR

1. ___
 2. ___
 3. ___
 4. ___
 5. ___
 6. ___

- 2 -

ACTUAL BEHAVIOR	IDEAL BEHAVIOR
7 I <u>always</u>	7 I should <u>always</u>
6 I <u>usually</u>	6 I should <u>usually</u>
5 I <u>often</u>	5 I should <u>often</u>
4 I <u>sometimes</u>	4 I should <u>sometimes</u>
3 I <u>occasionally</u>	3 I should <u>occasionally</u>
2 I <u>rarely</u>	2 I should <u>rarely</u>
1 I <u>never</u>	1 I should <u>never</u>
0 Does not apply.	0 Would not apply.
MY ACTUAL BEHAVIOR	MY IDEAL BEHAVIOR
___ 7. Use a physical education curriculum guide in planning physical education lessons for my students.	7. ____
___ 8. Specify instructional objectives in physical education for the children I teach.	8. ____
___ 9. Develop lesson plans in physical education for the children without help from a specialist.	9. ____
___ 10. Select instructional materials for physical education classes I teach.	10. ____
___ 11. Assess pupil progress in physical education.	11. ____
___ 12. Report to parents on the progress children are making in physical education.	12. ____
___ 13. Remain in the room with the children when the physical education specialist is teaching.	13. ____
___ 14. Provide physical education activities which coordinate with the children's classroom experiences in social studies, language arts, etc.	14. ____
___ 15. Include some kind of physical education activity in the daily program of the children when the specialist is not available.	15. ____
___ 16. Provide the physical education specialist with information on unit activities and needs.	16. ____
___ 17. Share lesson plans for areas other than P. E. with the P. E. specialist so that the specialist is informed of plans, needs, and interests.	17. ____
___ 18. Attend staff development (inservice) sessions in which a P. E. specialist works with <u>classroom teachers</u> , providing ideas and techniques for teaching physical education.	18. ____
___ 19. Observe demonstration teaching sessions in which a P. E. specialist works with <u>children</u> and provides classroom teachers with ideas, materials and techniques for teaching physical education.	19. ____

- 3 -

ACTUAL BEHAVIOR

- 7 I always
 6 I usually
 5 I often
 4 I sometimes
 3 I occasionally
 2 I rarely
 1 I never
 0 Does not apply.

IDEAL BEHAVIOR

- 7 I should always
 6 I should usually
 5 I should often
 4 I should sometimes
 3 I should occasionally
 2 I should rarely
 1 I should never
 0 Would not apply.

MY ACTUAL
BEHAVIOR

- ___ 20. Work with the specialist to plan activities I can use.
 ___ 21. Work with the specialist in establishing the schedule
 of physical education classes for the unit.
 ___ 22. Work with the P. E. specialist to select instructional
 materials in P. E. for use in the unit or classroom.
 ___ 23. Work with the physical education specialist to assess
 pupil progress in physical education.

MY IDEAL
BEHAVIOR

20. ___
 21. ___
 22. ___
 23. ___

COMMENTS:

- 4 -

Part B: Physical Education Behavior Description

Each item in this section describes a specific task which the physical education specialist may or may not do, depending on the staffing arrangements for physical education in your school. Please indicate the frequency with which you believe the physical education specialist actually does and ideally should do each task.

1. READ each item carefully.
2. THINK how frequently you believe the P. E. specialist actually does that task in your school and enter your answer in the left hand column.
3. THINK how frequently you believe the P. O. specialist should do that task and enter your answer in the right hand column.
4. Please RESPOND to every item and use the frequency code shown below.

SPECIALIST'S ACTUAL BEHAVIOR

SPECIALIST'S IDEAL BEHAVIOR

- | | |
|--|---|
| 7 The P. E. specialist <u>always</u> does this task. | 7 The P. E. specialist should <u>always</u> do this task. |
| 6 <u>usually</u> does this task. | 6 should <u>usually</u> do this task. |
| 5 <u>often</u> does this task. | 5 should <u>often</u> do this task. |
| 4 <u>sometimes</u> does this task. | 4 should <u>sometimes</u> do this task. |
| 3 <u>occasionally</u> does this task. | 3 should <u>occasionally</u> do this task. |
| 2 <u>rarely</u> does this task. | 2 should <u>rarely</u> do this task. |
| 1 <u>never</u> does this task. | 1 should <u>never</u> do this task. |
| 0 I don't know. | |

ACTUAL
BEHAVIORIDEAL
BEHAVIOR

- | | |
|--|----------|
| ____ 24. Provide classroom teachers with assistance so they can continue a sequence of instruction in a given P. E. activity which has been initiated in P. O. class. | 24. ____ |
| ____ 25. Help classroom teachers specify instructional objectives in physical education for children. | 25. ____ |
| ____ 26. Help classroom teachers identify and locate resources in physical education. | 26. ____ |
| ____ 27. Respond to requests from classroom teachers who wish to provide their children with physical education activities, either for recreational purposes or to enrich their regular classroom experiences. | 27. ____ |
| ____ 28. Participate in parent-classroom teacher conferences about children. | 28. ____ |
| ____ 29. Prepare lesson plans in physical education for classroom teachers to follow. | 29. ____ |
| ____ 30. Provide classroom teachers with a variety of instructional materials in P. E. they can use in the unit or classroom. | 30. ____ |

- 5 -

SPECIALIST'S ACTUAL BEHAVIOR

- 7 The P. E. specialist always does this task.
- 6 usually does this task.
- 5 often does this task.
- 4 sometimes does this task.
- 3 occasionally does this task.
- 2 rarely does this task.
- 1 never does this task.
- 0 I don't know.

SPECIALIST'S IDEAL BEHAVIOR

- 7 The P. O. specialist should always do this task.
- 6 should usually do this task.
- 5 should often do this task.
- 4 should sometimes do this task.
- 3 should occasionally do this task.
- 2 should rarely do this task.
- 1 should never do this task.

ACTUAL
BEHAVIORIDEAL
BEHAVIOR

- | | |
|---|---------|
| ___ 31. Ask classroom teachers to remain in the room with their children during physical education classes. | 31. ___ |
| ___ 32. Provide physical education activities which coordinate with the children's classroom experiences in social studies, language arts, etc. | 32. ___ |
| ___ 33. Share lesson plans with classroom teachers so that classroom teachers know what is happening in P. E. classes. | 33. ___ |
| ___ 34. Specify instructional objectives for P. E. classes. | 34. ___ |
| ___ 35. Provide for individual differences of students in teaching physical education classes. | 35. ___ |
| ___ 36. Assess pupil progress in physical education. | 36. ___ |
| ___ 37. Report to parents on the progress children are making in physical education. | 37. ___ |
| ___ 38. Plan P. E. classes that are independent of what students are doing in social studies, language arts, etc. | 38. ___ |
| ___ 39. Teach physical education to the children to develop skills and understandings in physical education. | 39. ___ |
| ___ 40. Assign children to physical education classes according to their needs and/or abilities in physical education. | 40. ___ |
| ___ 41. Teach physical education classes during the classroom teachers' planning time. | 41. ___ |
| ___ 42. Observe children's non-P. E. activities in the unit or classroom. | 42. ___ |

COMMENTS:

- 6 -

For the next items, please use the following frequency code to indicate the frequency with which you and the P. E. specialist actually do and ideally should do each task.

- | | |
|---------------------------------|--------------------------------|
| 7 More than once a week | 3 Less often than once a month |
| 6 Once a week | 2 Once a year |
| 5 Once every two or three weeks | 1 Never |
| 4 Once a month | 0 I don't know |

HOW OFTEN
DO YOU:

HOW OFTEN
SHOULD YOU:

- | | |
|--|---------|
| ___ 43. Teach P. E. to the children to develop their basic skills and understandings (basic P. E. curriculum). | 43. ___ |
| ___ 44. Provide P. E. activities for the children to supplement the basic physical education curriculum. | 44. ___ |
| ___ 45. Use P. E. activities during the school day for the children's own personal enjoyment. | 45. ___ |
| ___ 46. Use physical education activities to provide a "change-of-pace" in the classroom activities. | 46. ___ |

HOW OFTEN DOES
THE SPECIALIST:

HOW OFTEN SHOULD
THE SPECIALIST:

- | | |
|---|---------|
| ___ 47. Meet with individual classroom teachers to exchange ideas, concerns or information. | 47. ___ |
| ___ 48. Work with classroom teachers individually or in small groups to help them gain skills, understandings, and competencies in physical education. | 48. ___ |
| ___ 49. Meet with your unit to plan P. E. activities. | 49. ___ |
| ___ 50. Provide demonstration teaching sessions in which the P. E. specialist works with <u>children</u> and provides classroom teachers with ideas, materials, and techniques for teaching P. E. | 50. ___ |
| ___ 51. Provide staff development (inservice) sessions in which the P. E. specialist works with <u>classroom teachers</u> to provide ideas and techniques for teaching P. E. | 51. ___ |
| ___ 52. Supervise classroom teachers' instruction in P. E. | 52. ___ |
| ___ 53. Meet with other specialists in the building as a team. | 53. ___ |

- 7 -

Part C: School and Teacher Information

54. Which description best fits the physical education specialist who serves your school?

- _____ 1. Provides all of the instruction children receive in P. E.; classroom teachers are not expected to teach P. E.
- _____ 2. Provides most of the instruction children receive in P. E.; also works with classroom teachers who may be expected to do some physical education teaching.
- _____ 3. Does no regular teaching; provides assistance to classroom teachers who may be expected to teach physical education.

55. How often do children in your unit have physical education classes with the P. E. specialist? (Give the number of times per week and the number of minutes per class.)

Number of times per week

Number of minutes per week

56. How much responsibility do you have for teaching physical education to the children in your unit? (Check one)

- _____ 1 None _____ 2 Full responsibility
- _____ 3 Some responsibility that complements the work of the specialist
- _____ 4 Some responsibility that is independent of the work of the specialist

57. Do any other classroom teachers in your instructional unit have responsibility for teaching physical education to the students in your unit?

- _____ 1 Yes _____ 2 No

58. Has your unit identified a person to serve as a liaison or communication link between your unit and the physical education specialist for sharing information, needs, and/or concerns?

- _____ 1 Yes _____ 2 No

59. Considering your own background and experience in these special areas:

a. How confident do you feel about teaching P. E. to your students?
Not confident 1 2 3 4 5 6 7 Very confident

b. How confident do you feel about teaching art to your students?
Not confident 1 2 3 4 5 6 7 Very confident

c. How confident do you feel about teaching music to your students?
Not confident 1 2 3 4 5 6 7 Very confident

60. In terms of meeting the physical education needs and interests of the children in your unit, how would you rate the effectiveness of the P. E. program in your school?

Ineffective 1 2 3 4 5 6 7 Very effective

APPENDIX B

PRINCIPAL QUESTIONNAIRE

PRINCIPAL QUESTIONNAIRE

Please refer to the cover letter for the definitions of the roles of special area personnel in art, music, and physical education. DO NOT INCLUDE kindergarten in your answers. COMPLETE ALL NINE STATEMENTS BELOW BY CIRCLING ONE RESPONSE FOR EACH ITEM.

Example:

A. Our school has an ART SPECIALIST TEACHER for these grade levels:

all grades (1-5 or 6) lower grades only upper grades only none of the grades

B. Our school has an ART CONSULTANT/TEACHER for these grade levels:

all grades lower grades upper grades none of the grades

ART

1. Our school has an ART SPECIALIST TEACHER for these grade levels:

all grades (1-5 or 6) lower grades only upper grades only none of the grades

2. Our school has an ART CONSULTANT/TEACHER for these grade levels:

all grades lower grades upper grades none of the grades

3. Our school has an ART SUPERVISOR/CONSULTANT for these grade levels:

all grades lower grades upper grades none of the grades

MUSIC

4. Our school has a MUSIC SPECIALIST TEACHER for these grade levels:

all grades (1-5 or 6) lower grades only upper grades only none of the grades

5. Our school has a MUSIC CONSULTANT/TEACHER for these grade levels:

all grades lower grades upper grades none of the grades

6. Our school has a MUSIC SUPERVISOR/CONSULTANT for these grade levels:

all grades lower grades upper grades none of the grades

P.E.

7. Our school has a PHYSICAL EDUCATION SPECIALIST TEACHER for these grade levels:

all grades (1-5 or 6) lower grades only upper grades only none of the grades

8. Our school has a PHYSICAL EDUCATION CONSULTANT/TEACHER for these grade levels:

all grades lower grades upper grades none of the grades

9. Our school has a PHYSICAL EDUCATION SUPERVISOR/CONSULTANT for these grade levels:

all grades lower grades upper grades none of the grades

APPENDIX C

CORRESPONDENCE WITH THE PRINCIPALS OF SELECTED SCHOOLS



the
Wisconsin
Research and Development Center
for Cognitive
Learning

the University of Wisconsin: 1025 West Johnson Street - Madison, Wisconsin 53706 (608)262-4901

November 26, 1976

Dear Colleague:

Principals of IGE schools frequently ask, "What might be the role of specialists and staff teachers in programs of art, music, and physical education in IGE schools?" Perhaps you have asked that question, or know others who have. In an attempt to provide answers for you and others, the Wisconsin Research and Development Center for Cognitive Learning is conducting a study to (a) define the roles of specialists in art, music and physical education; (b) to define the roles of staff teachers who may have responsibilities in these areas; and (c) to examine the organizational and instructional relationships between specialists and staff teachers in IGE schools. The results of the study should offer suggestions for the effective use of specialists and staff teachers in meeting the needs of children in art, music, and physical education.

To obtain this information, separate questionnaires have been developed for specialists and staff teachers. All three specialist questionnaires contain identical tasks, but each instrument is modified so the subject descriptor refers either to art, music, or to physical education. The basic staff teachers questionnaire is also modified in a similar way to yield three subject area questionnaires. Specialists will be asked to indicate the frequency with which they perform certain tasks related to their particular area of instruction, as well as the frequency with which they believe similar tasks are performed by staff teachers. Staff teachers will be asked the frequency with which they perform tasks related to one of these special areas, as well as the frequency with which they believe similar tasks are performed by the specialist for that area. For each task, specialists and staff teachers will respond in terms of their actual behaviors as well as what they believe might be their ideal behaviors.

Previous research shows that most staff teachers are likely to provide children with activities in one of the special areas of art, music, or physical education rather than in all three. Therefore, in order to obtain information that would be most helpful to the present study, it was decided to identify staff teachers having a specific interest and/or background in either art, music, or physical education and have them respond to the appropriate questionnaire rather than to distribute the questionnaires randomly.

Page 1
November 16, 1976

Your school has been randomly selected from a pool of IGE schools as a possible participant in the study. If you agree to participate, members of your staff would then be asked to complete a questionnaire that should take approximately 20 minutes of their time. The teachers would be assigned identification numbers to insure their confidentiality, but having their names would enable us to make any necessary follow-up contacts directly with them. We would appreciate it if you would identify three people within each unit--a staff teacher with a special interest in each of the three areas.

At this time we are waiting for final clearance from the Office of Management and the Budget in Washington, D. C., but we anticipate having the questionnaires in your school by the first week in January, 1977. Please complete the enclosed form and return it to the Center as soon as possible.

We are looking forward to receiving your response and thank you for your cooperation and professional interest in this important project. A summary of the results will be distributed to every school participating in the study. If you have any questions, please call 608/263-4180.

Sincerely,

Robert E. Pettold
Robert E. Pettold
Faculty Associate

Renee E. Forrester
Renee E. Forrester
Project Assistant

Enclosure

the University of Wisconsin - 1025 West Johnson Street - Madison, Wisconsin 53706 (608) 262-4901

Physical Education:

- | Name | Unit | Area of Interest |
|------|------|------------------|
|------|------|------------------|

_____, Principal
signed

APPENDIX D

INFORMED CONSENT FORM

Research StudyInformed Consent Form

The research study in which you are participating is designed to examine the role behaviors of specialists and staff teachers as these behaviors relate to instructional programs of art, music, or physical education. Because schools are not always able to support programs taught only by specialists in each of these areas, it is not unusual to find other staffing arrangements in which staff teachers may assume some instructional responsibility. The nature of any cooperative efforts between specialists and staff teachers is influenced, in part, by the ways in which these respective roles might be defined and clarified. The attached questionnaire contains a number of task statements pertaining to one of the special areas. You are asked to indicate the frequency with which you now perform each task, as well as the ideal frequency with which that task might be performed. The results of the study should offer suggestions for more effective use of specialists and staff teachers in meeting the needs of children in art, music, and physical education.

The anonymity of all participants is guaranteed and no individual or school will be identified in any reports of the research. The results of the research should be of practical value to administrators and instructional personnel concerned with selecting viable alternatives to the more traditional staffing arrangements for these special areas in IGE schools.

The University of Wisconsin-Madison has formally assured the United States Department of Health, Education, and Welfare (DHEW) that it will assure the protection of any human being exposed to risk in any project or program that DHEW or any of its agencies has been requested to support. A copy of this assurance will be made available to you upon request.

There are no known discomforts or risks associated with any of the procedures in which you will participate and such procedures are in conformity with accepted professional practice.

Any questions you may have concerning the procedures to be utilized in this study will be answered. You are free to withdraw your consent and to discontinue participation in this study at any time.

Please sign below to indicate your consent to participate in the study.

Subject

Center Planning and Policy Committee

Richard A. Rossmiller
Wayne Otto
Center Co-directors

Wayne Otto
Area Chairperson
Studies in Reading, Language
and Communication

Marvin J. Fruth
Area Chairperson
Studies of Implementation of
Individualized Schooling

Herbert J. Klausmeier
Area Chairperson
Studies of Instructional Programming
for the Individual Student

James M. Lipham
Area Chairperson
Studies of Administration and
Organization for Instruction

Thomas A. Romberg
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